CLEAN WATER ACT (CWA) BASE 106 GRANT APPLICATION

WATER POLLUTION CONTROL PROGRAM
WATER QUALITY MANAGEMENT PLANNING [604(b)]
INTEGRATED WORKPLAN

FY2011-FY2012 FEDERAL FUNDING (Base 106)
FY2009-FY2010 FEDERAL FUNDING [604(b)]

CLEAN WATER BRANCH (CWB) &
ENVIRONMENTAL PLANNING OFFICE (EPO)

By submitting this application, the State of Hawaii certifies that the $106,600 of increased funds will be used to strengthen permitting and enforcement efforts and to ensure that these funds supplement and expand, not supplant, base permitting and enforcement program resources.

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CLEAN WATER BRANCH (CWB) & ENVIRONMENTAL PLANNNING OFFICE (EPO)

EXECUTIVE SUMMARY

Goals, Program Objectives, Sub-objectives, and Targets: The program goals for **federal environmental protection Goal 2 (Clean and Safe Water) and related State Department of Health (DOH) are listed below**.

Environmental Health Administration (EHA) Existing Goals, Indicators, Measures of Effectiveness (MOE)

1. STATE WATER GOAL: • **To ensure that Hawaii's coastal waters are safe and healthy for people, plants and animals.** • **To protect and restore the quality of Hawaii's streams, wetlands, estuaries and other inland waters for fish and wildlife, recreation, aesthetic enjoyment and other beneficial uses.**
Environmental Indicators: • **Shoreline postings due to sewage or other water pollution.** • **Percentage of wastewater recycled annually** • **Wastewater treatment plant operations and maintenance compliance record.** • ***Beach closure/warning days annually due to sewage or water pollution (CWB)** • ***Number of Impaired Streams Listed (EPO)**

Measures of Effectiveness:

- *** Percent of wastewater dischargers in compliance with permits (CWB) healthy for people and the environment**
- *** Percent of marine recreational sites in compliance with rules (CWB)**

State Environmental Health Administration Goal from: Strategic Plan for Hawaii's Environmental Protection Programs (1999,2001)
Environmental Indicators from: Indicators of Environmental Quality (2009)
Measures of Effectiveness from: Variance Report to Legislature (annually)

2. DEPUTY DIRECTOR GOALS:

GOAL 1: Emergency Preparedness

GOAL 2: Community Involvement

GOAL 3: Permit Streamlining

GOAL 4: Vigorous Enforcement

GOAL 5: State Leadership

GOAL 6: Flexible Methods

GOAL 7: Measurable Results

GOAL 8: Good Science

FY2011 – FY2012 STATE WATER PRIORITY, CONSOLIDATION PROGRAM LIST:

1. **Set priorities** (& review at ½ yr & as needed).
    - Done for each program individually Jan-Mar, 2010; Refer to tables attached to specific work plans for more detail
2. **Collaboration - start, continue, increase.**
    - Transition of drinking water monitoring to counties (SDWB 2d)
    - Transition of WW operator training from state to counties, vendors (WWB 2d)
    - TMDL reports (EPO 3d)
    - Integrated Report (EPO 4th)
    - *Monitoring:*
        - *Water Monitoring Governance Committee – meet routinely, update comprehensive monitoring strategy*
        - *Monitoring initiative, bio-assessment, TMDL*
        - Sediment sampling protocols (HEER) Pearl Harbor
    - *Reorganization*
    - Redo land use review system (EPO 6th)
    - Time & effort, & cost recover IT (HEER)
    - Document management IT (HEER, SHWB)
    - *save beaches, help taro farmers*
3. **Emergency preparedness and response.**
    - *Re/establish assignments and communications lines, SOP, COOP*
    - *Increase staff preparedness (personal - emergency kits, home supplies & plans), ID roles & training*
    - *Support Department Operations Center (info, graphs, maps) & DOH role in ESF.*
    - Beach monitoring (CWB 4th); WQ viewer for public in development; *[Tier I beach sampling to 2x/wk]*
    - (Encourage) counties' further development of their WARN (Water/Wastewater Agency Response Networking) (SDWB)
    - *Use national Outbreak Reporting System (NORS) (CWB WO is EMD rep)*
4. **Promote economic recovery.**
    - **ARRA,** expend ASAP: CWSRF (+base, WWB 1st), DWSRF (+base, SDWB 1st); 604b (NHD, city bmps)(EPO 1st)
    - Priority for permits: CIP, construction (& clean energy & GHG) (CWB 1st)
    - Expedite IWS, WWTP, and building permit approvals (WWB 3d)
    - Increase *DWSRF* utilization rate (SDWB 1b, WWB 1b)
5. **IT and Data Management System.**
    - *E-permitting.*
        - CROMERR: netDMR application sent (CWB);
    - *Add to environmental health warehouse, phase 2 underway*
    - SDW viewer operational, obtain (encourage) counties' facility coordinates

- Helps monitoring transition in #2 (SDWB 5th)
- NHD implementation (EPO 5th)
- Update NPDES database w/ ICIS-NPDES (CWB)
- Finish WWB database centralization (WWB)

6. **Clean energy, GHG, waste reduction.**
   - Upgrade IUP criteria to encourage clean energy, GHG, waste reduction in SRF projects (WWB 4a) (*PRC criteria done*)
   - Promote water recycling and wastewater sludge reuse. (WWB 4b)
   - Assist the State Building Code Council & counties on graywater recycling programs (WWB 4c).
   - Encourage methane recovery from anaerobic digesters (WWB 4d)
   - *Distribute smart growth checklist w/ permit & approval applications (paper & e-version, add to websites)*
7. **Other**
   - Financial reporting (ERO)
   - WQS updates (EPO 2d): 1, entero geomean; 2 chlordane dieldrin; 3, many toxics
     - Bioassessment (EPO)
   - Meet NPDES permit targets (CWB 2d) 90% are current (EPA grant target)
   - Meet NPDES inspection targets (CWB 3d) 50% majors, 20 % minor, 10% NGPC (EPA grant targets)
   - Adopt ground water rule (SDWB 3d)
   - Obtain chemical monitoring waiver program approval (SDWB 4th)
   - MCL compliance >99% (SDWB 6th)
   - Sanitary surveys, 30 (SDWB 7th)
   - Inspections (WWB 5th) Annual O&M for WWTP & reuse facilities, initial aerobic tx units; complaint response
   - Timely enforcement for WW system violations, found in complaints & O&M inspections.
     - Resolve pending enforcement actions.
     - Resolve CCH sewage case (joint CWB-WWB). still on-going.
   - Animal waste: approve management plans; cover complaints (WWB 6th)

DATA MANAGEMENT ISSUES AND BUDGET (In and outside of federal workplan)**:**

Clean Water Branch:

Improve the Data Management System.

a. Develop Phase II of the One Stop program
b. Implement public access to the EMD branches via Hawaii Business Express for answers or advice.
c. e-NOI
d. Implement ICIS-NPDES
e. Upgrade CWB BEACH web site. (Done)
f. Upgrade water quality notification. (Done)
g. Upgrade HI NPDES data system.

Environmental Planning Office:

1. Complete the EPO Data Management Plan (as a component of EPO QA Program Plan) and implement EPO's data management priorities (e.g. STORET data entry).
2. Clarify the assignment of QA/QC, data processing, and information management tasks within EPO (staffing issue).
3. Improve the quantity, quality, and utility of secondary data submitted and mined for EHA water program uses (e.g. integrated reporting).
4. Centralize the posting of EHA program databases for cross-program, read-only, real-time access.
5. Facilitate the standardization of assessment decision unit delineation and addressing through enhancement of the National Hydrography Dataset (NHD) local resolution data for Hawaii.
6. Promote and assist strategic information management planning and implementation.

Environmental Protection Agency (EPA) Existing Goals and Objectives

3. EPA GOALS: EPA Goals from: 2006-2011 Strategic Plan

GOAL 2: Clean and Safe Water

GOAL 4: Healthy Communities and Ecosystems

GOAL 5: Compliance and Environmental Stewardship

EPA GOAL 2 Objectives:

2.1. **Protect Human Health**: Protect human health by reducing exposure to contaminants in drinking water, in fish and shellfish, and in recreational waters.
- Water safe for swimming.

2.2. **Protect Water Quality**: Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.
- Improve water quality on a watershed basis.
- Improve coastal and ocean waters.

2.3. **Enhance Science and Research**: Provide and apply a sound scientific foundation to EPA's goal of clean and safe water by conducting leading-edge research and developing a better understanding and characterization of the environmental outcomes under Goal 2.
- Apply best available science.

4.3. **Ecosystems**

- Protect and restore ecosystems.
- Increase wetlands.

4.4. **Enhance Science and Research**

- Apply the best available science.

5.1. **Improve Compliance**

- Compliance assistance.
- Compliance incentives.
- Monitoring and enforcement.

5.2. **Improve Environmental Performance through Pollution Prevention and Innovation**

- Prevent pollution and promote environmental stewardship by government and the public.
- Prevent pollution and promote environmental stewardship by business.
- Business and community innovation.
- Environmental policy innovation.

Enhance Science and Research.

- Strengthen science.

Performance Assessment Measures (PAMs): from: FY 2010 EPA National Water Program Guidance

- WQ-8: Number, and national percent, of approved TMDLs that are developed by a) States or EPA, and b) States, on a schedule consistent with national policy. See Attachment 3, Table 1 for TMDL task/output schedule and PAM calculations.

Core Performance Measures (CPMs):

-

Hawaii Environmental Indicators from: 2010 HIDOH-EHA Indicators of Environmental Health

Percentage of Population Served Drinking Water Meeting State and Federal Microbiological and Chemical MCLs
Cumulative Number of Sanitary Surveys Conducted for Drinking Water Systems in Hawaii
Percentage of Injection Well Facilities with Current State Underground Injection Control (UIC) Permits
Shoreline Postings Due to Sewage or Other Water Pollution
Percentage of Wastewater Recycled Annually
Wastewater Treatment Plant Operation & Maintenance Compliance
Number of Impaired Streams Listed, 2006
Number of Impaired Coastal Waters Listed, 2006

Federal EPA Goal from: 2006-2011 EPA Strategic Plan
Environmental Indicators from: 2010 HIDOH-EHA Indicators of Environmental Health
Performance Assessment Measures from: FY 2010 EPA National Water Program Guidance

FY 2010 and FY 2011 ACCOMPLISHMENTS (State and Federal):

Clean Water Branch:

A. PERMITS

General permitting authority continues to be utilized by the State by EPA to process the overwhelming amount of applications for storm water and construction related activities.

FY2010

At the start of FY 10, two (2) major and 10 minor individual NPDES permits were scheduled to be issued.

In FY 10 (from October 1, 2009 to March 31, 2010), one (1) major, three (3) minor, and seven (7) minor stormwater individual NPDES permits were issued. One (1) minor and four (4) minor stormwater individual NPDES permits have completed their public notice process and are scheduled to be issued in April 2010. In addition, 176 NGPCs were issued. The CWB reissued 62 of the 558 administratively extended NGPCs from October 2007. As of March 2010, 71 of the administratively extended NGPCs have been terminated.

In the Section 401 WQC program, five (5) WQCs were issued or waived.

FY2011

At the start of FY 11, two (2) major and four (4) minor individual NPDES permits were scheduled to be issued.

In FY 11 (from October 1, 2010 to March 1, 2011), no major, three (3) minor, and 10 minor stormwater individual NPDES permits were issued. Two (2) major, two (2) minor and one (1) minor stormwater individual NPDES permits have completed their public notice process and are scheduled to be issued in March-April 2011. In addition, 90 NGPCs were issued. The CWB reissued five (5) of the 558 administratively extended NGPCs from October 2007. Engineers were directed to focus efforts on the Individual Permit Issuance Schedule and new NOIs. As of March 1, 2011, 357 of the administratively extended NGPCs have been terminated.

In the Section 401 WQC program, five (5) WQCs were issued or waived.

From May 2010 to mid-March 2011, three (3) engineers were instrumental in development, design, and testing of the Water Pollution Control (WPC).

B. COMPLIANCE AND ENFORCEMENTS

FY2010

In FY 2010, the Enforcement Section has issued eight (8) NFVO, completed/closed 8 NFVO's, collected a total of $23,825 in penalties and had one SEP project completed (Hokulia settlement, $150,000). In this same period of time, 51 Notices of Apparent Violation/Request for information letters were issued. One individual permitted facility, 23 NGPC, and 21 non-permitted facilities were inspected.

The Enforcement Section has also been active in working with the EPA and State Attorney Generals on negotiations with the CCH on their wastewater spills and treatment plant issues. Follow-up work has also been done on the Maui County and Hawaii Department of Transportation Consent Decrees.

One person has been working almost full time on the ICIS/ECHO/DMR upgrades and data modernization to which we have had our first successful test of a permittee sending a completed DMR on line.

FY2011

In FY 2011 (October 1, 2010 to March 1, 2011), the Enforcement Section issued two (2) NFVO's, completed/closed three (2) NFVO's, and collected a total of $807,700 in penalties. In this same period of time, 36 Notices of Apparent Violation/Request for information letters were issued. Three (3) individual permitted facilities, 15 NGPC's, and 43 non-permitted facilities were inspected.

The Enforcement Section had been working with the EPA and State Attorney Generals on negotiations with the CCH on their wastewater spills and treatment plant issues to conclude with a Consent Decree in August 2010. Follow-up work has also been done on the Maui County and Hawaii Department of Transportation Consent Decrees. In a hearing, the Clean Water Branch prevailed over the City for its concrete dumping into Mailiili Stream for $1.7 million; however the City has appealed the hearing officer's decision. The CWB was actively investigating the Waimanalo Gulch Landfill even before they discharged landfill and medical waste into the ocean.

One person has been working almost full time on the ICIS/ECHO/DMR upgrades and data modernization to which we have had successful tests of permittees submitting electronic DMRs utilizing NetDMR. On November 15, 2010, the EPA gave its final approval for Cross-Media Electronic Reporting Rule (CROMERR) which allows the Section to start officially accepting

electronic DMR submittals. The Section is close to having one of the permittees start submitting DMR data to the production side of NetDMR.

C. AMBIENT MONITORING AND INTENSIVE SURVEYS

FY2010

The 2010 Water Quality Monitoring Program continues to monitor coastal waters at sites adjacent to 319h projects to determine if there are improvements to coastal water quality. The monitoring program also seeks to identify and characterize water quality problems in priority coastal and inland areas and selected watersheds where 303(d) process (listing impaired water and developing TMDLs) is ongoing, including measuring and establishing long-term trends. For FY-10(October 2009 through February 2010), 191 water samples were collected. For FY-2009 558 samples were collected. With Oahu Monitoring staff being cut by 4 positions, the number of coastal water samples being taken will be less.

CWB is working with the University of Hawaii on the EPA National Coastal Condition Assessment (NCCA) Project to begin Spring/Summer 2010 after field crews receive training from EPA. A training is scheduled for May 18-20, 2010 at Corvallis, Oregon, EPA Office of Research and Development. The training is mandatory for field crews and sampling will be audited by EPA during the NCCA work. Two CWB staff will be attending the training contingent on travel approval. A total of 50 stations will be sampled statewide for water, sediment, bacteria, and fish tissue. All samples will be sent to an EPA Laboratory.

West Maui Priority Watershed Sampling (WMPWS) had been re-scheduled for late summer of 2010, due to reduction in force. The Monitoring Section lost 5 Oahu positions. The proposed sampling crew for WMPWS will consist of mostly neighbor island staff and assisted by DLNR, Division of Aquatic Resources staff. Sampling protocols will follow the protocols of the NCCA and requires field crews to receive the training at EPA Office of Research and Development, Corvallis, Oregon. 50 stations of West Maui will be sampled for water and tested by DOH laboratory.

FY2011

For FY-2011(October 2010 through January 2011) 94 water samples were collected as part of the Water Quality Monitoring Program to monitor coastal waters at sites adjacent to 319h projects to determine if there are improvements to coastal water quality. In FY-2010, 387 water samples were collected vs. 558 water samples in FY-2009. The drop in numbers is due to the Oahu Monitoring staff being cut by 4 positions and a vacant position due to retirement.

CWB and the University of Hawaii participated in the National Coastal Condition Assessment (NCCA) Training in Corvallis, Oregon, EPA Office of Research and Development in May 2010. The University of Hawaii completed the NCCA sampling of 50 probabilistic designed stations in early FY-2011. Samples were sent to the EPA lab.

CWB completed the Priority West Maui Watershed sampling of 50 probabilistic designed stations in FY-2010. Samples were sent to the DOH lab and data was sent in to EPA. CWB used its neighbor island staff to conduct the field work due to a loss of 5 Oahu Monitoring staff.

Environmental Planning Office:

FY 2009 and FY2010

1. Water Quality Standards – revised numeric criteria for bacterial indicator in marine waters within 300m from shore (with CWB, approved by EPA) and in marine waters beyond 500m from shore and/or greater than 100ft deep (legislation signed into law by Governor); revised numeric criteria for toxic pollutants in all waters (correction of chlordane typographical error approved by EPA; chlordane and dieldrin revision approved by Governor and submitted for EPA approval; legislation revising priority pollutant criteria signed into law by Governor); added questions about fish consumption to Hawaii public health survey; established EHA policy for assessing the impact of critical habitat designations upon the potential reclassification of Class 1.b. and Class 2 inland waters; clarified distinctions between estuaries and other brackish inland waterbody types (Kaelepulu TMDL); obtained EHA and EMD concurrence to pursue wet weather exclusions and wildlife exclusions from bacterial indicator criteria, to be based on (1) UAA for full body contact recreation during extreme rainfall events and (2) standards revision to remove such recreation from designated uses (Kaelepulu TMDL); hired administrative associate (RCUH) for program administrative support (ARRA funds); analyzed the status of relationships between Class AA waters and various types of marine protected areas (EHA policy decision pending).

2. Biological Criteria/Bioassessments & Waterbody Assessment Decisions – completed EMAP Wadeable Streams probabilistic monitoring (report published by USGS Pacific Water Science Center); initiated Maui stream bioassessment monitoring (continuing, with USGS Pacific Water Science Center, RCUH, and others); completed bioassessments supporting current TMDL development projects (ongoing, with RCUH and others); designed and planned fish sampling with DLNR and HEER for toxic pollutant analysis and public health risk assessment (sampling events pending); explained bioassessment theory and methods for classes at Hawaii Pacific University; analyzed relationships between designated uses, evaluative criteria, waterbody assessment methodology, and use attainability (continuing, contractor's report completed); obtained, managed, and analyzed water quality data for 2008/2010 Water Quality Monitoring and Assessment Report (ongoing across reporting cycles), including (1) the presentation of information about the water quality monitoring and assessment decision process and

Call for Data to the Hawaii Coral Reef Working Group, and (2) collaboration with NELHA to develop a model data package; delineated assessment decision units for 2008/2010 Integrated Report.

3. TMDLs – EPA approved DOH's TMDL decisions for the N. and S. Forks of Kaukonahua Stream (with Tetra Tech, Inc. and RCUH) and Kaneohe Stream (with Jack D. Smith). TMDL decisions. for Waikele Stream and Kapakahi Stream (with Northwest Hydraulic Consultants and RCUH) and Hanalei embayment (with Tetra Tech, Inc.) will be submitted for EPA approval in FY2010. Extended the DOH Direct Project Agreement with Research Corporation of the University of Hawaii for Water Quality Assessment Project; completed scoping reports (including field surveys) for Nuuanu and Kalihi Stream TMDLs (in progress, with RCUH; initial contractor's tasks completed); presented research paper on Hawaii sediment TMDLs to the Joint Federal Interagency Sedimentation/Hydrologic Modeling Conference (upcoming).

4. Program Integration – submitted EPO Quality Assurance Program Plan to EHA Quality Assurance Management Committee; completed DOH/EPA Hawaii Monitoring Design Workshop/Training (December 2008); assisted Hawaii County with developing a water quality monitoring strategy; attended National Water Quality Monitoring Conference (upcoming); collaborated with Kalaupapa National Park on monitoring plans and sampling designs (continuing); secured MOU for joint stewardship of the Hawaii National Hydrography Dataset (NHD) with DLNR, DBEDT, and USGS; completed local NHD training; attended National NHD Stewardship Conference; hired geospatial information specialist (RCUH) for National Hydrography Dataset (NHD) and Integrated Report (ADB) support (ARRA funds), and completed standard USGS maintenance of existing dataset (with RCUH and MOU partners, in progress) and a presentation to Hawaii Congress of Planning Officials and Hawaii Geographic Information Coordinating Council; completed strategic planning analysis for continued staffing of TMDL program and shepherded the enactment of legislation that authorizes ongoing "exempt" status for two TMDL Coordinator positions; completed EHA conversion to electronic tracking of and involvement in the state legislative process; served on doctoral committee for University of Hawaii Department of Natural Resource and Environmental Management student (graduated 2009, now working as CZM planner for Hawaii County), and submitted a co-authored paper on Hilo Bay Watershed Management to the Journal of Environmental Planning and Management; discussed program results and plans with various interest groups (ongoing); provided Waikele Stream data package to U.S. Army Corps of Engineers for Central Oahu Watershed Study; participated in City training (WARMF model) associated with the Central Oahu Watershed Study (with RCUH); met with U.S. Army Corps of Engineers about collaborative funding for TMDL development and watershed planning; provided TMDL implementation information to Honolulu BWS for development of Koolaupoko Watershed Management Plan/County Water Use and Development plan; participated in U.S. Army Garrison Hawaii training (GSSHA model) associated with Army pollutant loading analyses for Hawaii installations (with RCUH); participated with HEER Office in Navy completion of Pearl Harbor sediment studies (ongoing); obtained access to DOT Highways MS4 Asset Management System and used it for watershed inventory/characterization (with RCUH); developed data sharing relationship with City MS4 inventory (with RCUH); accessed and used WWB database, EPA LCC and UIC databases for watershed inventory/characterization (with RCUH); assisted G. Guerra (EPA-CID) with Kaukonahua Stream/Wahiawa Reservoir investigation; intervened with Prof. Yost (UH-CTAHR) and North Shore Neighborhood Board regarding interpretation of 319

project data and water quality standards/impairment; presented DOH program updates and viewpoints about Wahiawa Reservoir management to state legislature (Rep. Oshiro and Sen. Bunda), North Shore Neighborhood Board, and Wahiawa Neighborhood Board; consulted with State Office of Planning about Land Use Commission Dockets for proposed Hawaii Memorial Park Cemetery expansion and relationship with Kawa Stream TMDLs, and relationship between proposed Koa Ridge development, impaired receiving waters, and future TMDLs; consulted with Maui developers about their implementation of County ordinances that require water quality data collection and pollutant loading analyses; served on National Fish Habitat Restoration Partnership Steering Committee (USFWS, continuing) and provided field orientations for national delegation; served on State Executive Committee for Hawaii component of Pacific Migratory Waterbird Joint Venture (USFWS wetland conservation initiative) (ongoing); organized EHA seminar on EPA/UH wetland monitoring and assessment project; coordinated EHA participation in Ocean Resource Management Plan (ORMP); completed responses to NOAA for Humpback Whale Sanctuary condition report; participated in formulation of NOAA Marine Debris Action Plan.

HUMAN RESOURCES
Personnel Assignment

Name	Position	Permitting Months	Compliance Months	Monitoring Months
Administration:				
Wong, Alec*	Br. Chief	3S	3S	3S
Nakamura, Jean*	Secretary II	3S	3S	3S
Shintani, Stacy	DPSA IV	4S	4S	4S
Teruya, Terry	EHS IV QA/QC	4S	4S	4S
Engineering:				
Pascua, Noralin***	Clerk Typist II	6F	6F	
Seto, Joanna	Engr. Sup VI	12S		
Tomomitsu, Mark***	Engr. V	12F		
Chen, Edward	Engr. V	12S(401WQC)		
Sumida, Shane	Engr. V	12S		
Poentis, Kris	Engr. V	12S		
Migita, Reef***	Engr. V	12F		
Lum, Darryl***	Engr. IV	12F		
Fouse, Jiaping***	Engr. III	12F(401WQC)		
Weaver, Stefanie***	Engr. III	12F		
Compliance:				
Takemoto, Jen***	Clerk Typist II		12F	
Tsuji, Michael	Sup-EHS V		12S	
Miyashiro, Scott***	EHS IV		12F	
Stoddard, Lilian	Engr. IV		12S	
Tanimoto, Jamie***	EHS III		12F	
Kurano, Mathew***	EHS IV		12F	
Vacant***	Engr. IV		12F	
Monitoring:				
Okubo, Watson	Sup-EHS V			12S
Vacant*	EHS IV			9S
Asakura, Roland*	EHS IV			9S
Furukado, Clifford*	EHS IV			9S
Ueunten, Gary*	EHS IV			9S
Mikami, Dale**	EHS IV			12F
Mukai, Neil**	EHS II			12F

Environmental Planning Office				
Vacant***	Planner VI	3.2F		
Matsunaga, Barbara***	Secretary II	3.1F		
Vacant***	TMDLCoord.		12F	
Doi, Jennifer***	EHS IV		12F	
Honda, Myron***	EHS IV		12F	
Sakamoto, Maile***	PPC			3.2F
Environmental Resources Office:				
Sasaki, Pat***	PHAO IV	1F		
Yamaguchi, Gordon***	Acct. III	1F		
Jacobson, Steven***	Hearings Officer	1F		
Environmental Management Division				
Vacant***	QA EHS IV	1.2F		
Magata, Kathi, "KC"***	DPSA IV	1F		
Vacant***	Clerk Typist II	1.2F		

*** 75% Base 106 and 25% NPS grant. ** 100% BEACH grant ***100% Base 106**

INTEGRATED PRIORITY WATERSHED ACTIVITIES
FY2011-FY2012
WATER PROGRAMS

HANALEI
WAIMANALO
WEST MAUI

Hanalei Watershed Work Plan for EPA and DOH

Introduction: In December 2006, HIDOH and EPA identified the Hanalei Watershed as a priority area for working with local watershed representatives to achieve water quality improvements (including improvements in coral reef ecosystem function and health) by 2012. Hanalei is also one of three priority watersheds in the State selected for development of local action strategies to address land-based pollution impacts on coral reefs. HIDOH responsibilities are to implement numerous environmental programs, especially under the Clean Water Act, focusing on nonpoint source TMDL development and implementation, beach monitoring and notification, and individual wastewater systems (OSDS strategy). EPA responsibilities are to provide funding, technical assistance, and training to protect and restore water quality and to conserve coral reefs. Primary pollutants of concern include nutrient, pathogen, and sediment levels in stream, estuary, and embayment waters. This work plan identifies the actions that EPA and HIDOH will take to better support the local watershed efforts to achieve water quality improvements by 2012.

In 1998, the Hanalei River was designated an American Heritage River. The local community used consensus-based decision making to develop a five-year Watershed Action Plan guided by the traditional Hawaiian Ahupua'a land management concept. A number of projects were successfully implemented, including extensive water quality monitoring by citizens. The Hanalei Watershed Hui (http://www.hanaleiwatershedhui.org) and the partners in the Coral Reef Local Action Strategy have been continually building on these efforts to address numerous issues affecting watershed health, particularly sediment control, wastewater treatment, and monitoring and evaluation (to establish baseline conditions, gauge the effects of BMPs, assess aquatic ecosystem health, and determine if alien species are contributing to soil erosion and landslides in the upper watershed). Much of this work was completed in 2003-2006 through an EPA Targeted Watershed Initiative grant, which generated additional projects and partnerships funded by the University of Hawaii Sea Grant Program, U.S. Fish and Wildlife Service, Waipa Foundation, Gerbode Foundation NOAA, and USDA Natural Resources Conservation Service. The Hanalei Watershed Hui also recieved a 2006 EPA Environmental Education Grant to teach 200 5th and 6th graders on the North Shore of Kauai what causes sediment pollution in the Hawaiian watershed, what effects it has on fresh water and coral reef ecosystems, and how the pollution can be controlled.

In 2007, HIDOH and EPA prepared draft Phase 1 TMDLs for sediment and bacterial indicators in inland waters and conducted a TMDL public information meeting and follow-up outreach on Kauai. HIDOH and EPA also participated in the 2007 Hanalei Watershed Science and Management Workshop and collaborated on three articles in the published proceedings (http://pubs.usgs.gov/of/2007/1219). In 2008, DOH completed and EPA approved these TMDLs. Implementation funding received from various sponsors by various watershed interest groups is currently addressing erosion from mountain access trails, nutrient loading from privately-owned taro pondfields, and wastewater system upgrades on the Hanalei National Wildlife Refuge.

Expected Outcomes for the Hanalei Watershed:

- Improvement in estimated load reductions and baseline water quality by 2012
- Partial restoration of water quality, defined by a delisting of one pollutant in at least one waterbody in the watershed by 2012

Performance Measures for activities in the Hanalei watershed:

- Completion of Watershed-Based Plan (WBP) addressing Phase 1 TMDLs (inland waters) and other community concerns
- Completion of Phase 2 TMDLs (marine waters) and related update of the WBP
- Implementation of on-the-ground projects (structural BMPs) focused on water quality improvement
- DOH/EPA funding of WBP/TMDL Implementation (FY 09/10 CWA 319 funds will be targeted to Hanalei and other priority watersheds)

PRIORITY WATERSHEDS – Integrated Priority Tasks for FY2011-FY2012 - HANALEI

Hanalei

Program Element Hanalei	Program Objective/Outcome	Task/Output	Target Schedule	Responsible Section, Staff, or Collaborating Organization	Funding Resources	Actual Completion Date
Monitoring	Assess water quality of North Kauai Beaches.	Conduct sampling and analyses of surface water from Anini Park, Kalihiwai Bay, Waioli Beach, Hanalei Bay Pavilion, Hanalei Bay Landing, and End of Weke Road.	10/1/2010	Kauai Chaper Surfrider Foundation, led by Carl Berg	Beach Fund	9/30/2011
	Ensure water quality is protected for drinking water sources or systems within the Hanalei Bay watershed.	Conduct routine monitoring of drinking water sources or systems in the area to determine compliance with drinking water regulations under the SDWA.	December 31, 2007	SDWB- Monitoring/ Water suppliers		
	Determine groundwater quality of the Hanalei Bay watershed.	1. Complete development of the Groundwater Monitoring and Assessment Strategy. 2. Conduct groundwater monitoring in the area according to the Strategy.	June 2007	SDWB- Groundwater Protection Program		
Permitting	Ensure NPDES and UIC permits remained current.	UIC inventory in progress				
TMDL	Complete TMDL development for all impaired waterbodies throughout Hanalei Bay watershed.	Conduct Hanalei Stream bioassessment and complete assessment report	July 2008	EPO		
		Submit Hanalei River TMDLs (stream/estuary)/submittal package	July 2008	EPO (DP)		
		Establish new Assessment Decision Units (ADUs) for all waterbodies throughout Hanalei Bay watershed/ADB records	December 2009	EPO CWB		

		Complete and produce document of basic TMDL Implementation Plan for Hanalei River.	Ongoing (Phased TMDL)	EPO CWB (PRC) WWB HW Hui USFWS		
		Complete scoping process for Waioli, Waipa, Waikoko stream systems/watershed inventory, scoping report, field sampling plan	Ongoing (Phased TMDL)	EPO CWB (PRC) EHA TMDL Workgroup HW Hui		
		Complete scoping process for Hanalei Bay/watershed inventory, scoping report, field sampling plan (explain how to establish loading capacity and load allocations for each ADU)	Ongoing (Phased TMDL)	EPO CWB (MON, PRC) EHA TMDL Workgroup HW Hui		
		Collect field data for remaining Hanalei watershed TMDLs (streams, estuaries, embayment)/data packages and EHA database records	Ongoing (Phased TMDL)	Negotiated based on field sampling plans		
		Submit TMDLs for remaining waterbodies within the Hanalei Bay watershed.	2010	EPO	EPA (Tetra Tech)	
TMDL and Watershed-Based Implementation	Reduce pollutant loads to restore impaired waterbodies in the Hanalei watershed area.	1. Develop and complete comprehensive TMDL Implementation Plan	2011	EPO, CWB (ENG, PRC); WWB, HW Hui, USFWS		
		2. Implement measures to reduce pollutant loads.				
Polluted Runoff Control	Achieve water quality improvement through 319(h) supported projects and CZARA implementation projects, as appropriate.	Coordinate watershed-based plans and TMDL implementation activities. Identify potential projects and implement strategies. Leverage funding to support implementation projects.	ongoing	PRC (PPC, EHS, IPA, PL)		

Waimanalo Watershed Work Plan for EPA and DOH

Introduction: In December 2006, HIDOH and EPA identified the Waimanalo Watershed as a priority for working with the local watershed representatives to achieve water quality improvements by 2012. HIDOH responsibilities are to implement numerous environmental programs, especially under the Clean Water Act, focusing on municipal stormwater management (MS4 NPDES permit conditions) and nonpoint source TMDL development and implementation on agricultural lands. EPA responsibilities are to provide funding, technical assistance, and training to protect and restore water quality. Primary pollutants of concern include nutrient and sediment levels in streams. This work plan identifies the actions that EPA and HIDOH will take to better support the local watershed efforts to achieve water quality improvements by 2012.

In 1998, Waimanalo Stream and two other Oahu streams were the first in Hawaii to be designated as water quality impaired streams under Clean Water Act Section 303(d). In 2001, EPA approved the HIDOH TMDLs addressing nutrient and sediment loads in Waimanalo Stream, and a plan for implementing these TMDLs was completed. A number of projects were successfully implemented, including water quality monitoring by citizens and academics and a stream restoration project that demonstrated the viability (and dangers) of revegatating riparian areas with native plants. The Kailua Bay Advisory Council (KBAC), U.S. Marine Corps, University of Hawaii College of Tropical Agriculture and Human Resources, Oahu Resource Conservation & Development, and other partners have been continually building on these efforts to address numerous issues affecting watershed health, and in 2007 KBAC completed a watershed-based plan for the Koolaupoko region, which includes the Waimanalo watershed. In 2006, HIDOH and EPA reissued NPDES MS4 permits that require the permittees (State of Hawaii Department of Transportation Highways Division and City & County of Honolulu) to complete an inventory of the entire MS4 and to prepare implementation and monitoring plans for the WLA components of the Waimanalo Stream TMDLs. This combination of MS4 and polluted runoff control activities is expected to provide new knowledge about urban/agricultural small watershed management that can be applied in other areas of Oahu.

Expected Outcomes for the Waimanalo Watershed:

- Improvement in estimated load reductions and baseline water quality by 2012
- Partial restoration of water quality, defined by a delisting of one pollutant in at least one waterbody in the watershed by 2012

Performance Measures for activities in the Waimanalo watershed:

- Completion of TMDL Implementation and Monitoring Plans by NPDES MS4 permittees (State DOT and City ENV), including responses to HIDOH plan reviewed
- Completion of Oahu RC&D project addressing pollutant loading from agricultural lands and stream channels and corridors
- Implementation of on-the-ground projects (structural BMPs) focused on water quality improvement
- DOH/EPA funding of WBP/TMDL Implementation (FY 09/10 CWA 319 funds will be targeted to Waimanalo and other priority watersheds)

PRIORITY WATERSHEDS – Integrated Priority Tasks for FY2011-FY2012 - WAIMANALO

Waimanalo

Program Element Waimanalo	Program Objective/Outcome	Task/Output	Target Schedule	Responsible Section, Staff, or Collaborating Organization	Funding Resources	Actual Completion Date
Monitoring	Obtain additional monitoring data for TMDL development and 319 needs.	Conduct needed sampling and analysis of surface water from the Waimanalo watershed.	Ongoing	CWB Monitoring	Federal 106	
	Ensure water quality is protected for drinking water sources or systems within the Waimanalo watershed area.	Conduct routine monitoring of drinking water sources or systems in the area to determine compliance with drinking water regulations under the SDWA.	December 31, 2008	SDWB Monitoring/ Water suppliers		
	Determine groundwater quality in the Waimanalo watershed area.	1. Complete development of the Groundwater Monitoring and Assessment Strategy. 2. Conduct groundwater monitoring in the Waimanalo watershed area according to the Strategy.	June 2008	SDWB- Groundwater Protection Program		
Permitting	Ensure NPDES and UIC permits remained current.	None for this period.				
TMDL	Complete TMDL development for all impaired waterbodies throughout Waimanalo watershed.	Establish new Assessment Decision Units (ADUs) for all waterbodies in Waimanalo watershed and input to ADB records.	To be determined	EPO CWB (DM, PRC)		
		Complete scoping process for Waimanalo coastal waters/waterbody inventory, scoping report, field sampling plan (explain how to establish loading capacity and load allocations for each ADU and links with WLAs).	To be determined	EPO EPA? (FSP) CWB (ENG, MON, PRC) KBAC UH EHA TMDL Workgroup		
		Collect field data for Waimanalo coastal waters, and prepare and complete EHA database records.	To be determined	Negotiated based on field sampling plans		
		Submit TMDLs for Waimanalo coastal waters for EPA approval.	To be determined	EPO		

PRIORITY WATERSHEDS – Integrated Priority Tasks for FY2011-FY2012 - WAIMANALO

Waimanalo

Program Element Waimanalo	Program Objective/Outcome	Task/Output	Target Schedule	Responsible Section, Staff, or Collaborating Organization	Funding Resources	Actual Completion Date
TMDL and Watershed-Based Implementation	Reduce pollutant loads to restore impaired waterbodies in the Waimanalo watershed area. Assess effectiveness of implementation measures	1. Develop and complete basic TMDL and watershed-based implementation plans for Waimanalo coastal waters. 2. Implement measures to reduce pollutant loads.	To be determined	EPO, CWB (ENG, PRC), KBAC		
		Review Phase I MS4 WLA implementation plans, monitoring plans, Phase II MS4 SWMPs, and NPDES inspection plans to ensure consistency with objectives of the TMDL Implementation Plans and their effectiveness.	Ongoing	CWB (ENF, ENG, PRC) EPO		
		Develop and provide recommendations of WLA implementation conditions for reissuance of Phase I MS4 permits.	Ongoing	CWB (ENF, ENG, PRC) EPO		
Polluted Runoff Control	Achieve water quality improvement through 319(h) supported projects and CZARA implementation projects, as appropriate.	Identify potential projects, based on completed TMDLs, TMDL implementation plans, and watershed-based plans and target funding and resources	FY09-FY10	CWB (PRC) EPO		
		Develop watershed implementation workplans for State use.	Ongoing	CWB (PRC)		
		Implementation to address TMDL and watershed-based plan priorities (Oahu RC&D effort targeting BMPs at agricultural operations, etc.)	March 2011	CWB (PRC) via contract with Oahu RC&D	$400, 000 (fed-319) $400,000 (matching)	
		Coordinate discussions between Monitoring Section and EPO and select the best monitoring and data collection approach to assess water quality baseline conditions and potential improvements as a result of the project implementation efforts.	Ongoing; linked to Comp. Monitoring Strategy	CWB (MON, PRC) EPO		

PRIORITY WATERSHEDS – Integrated Priority Tasks for FY2011-FY2012 - WAIMANALO

Waimanalo

Program Element Waimanalo	Program Objective/Outcome	Task/Output	Target Schedule	Responsible Section, Staff, or Collaborating Organization	Funding Resources	Actual Completion Date
		Identify watershed training/technical assistance needs for developing and implementing watershed-based plan.	As needed	CWB EPO WWB SDWB		

West Maui Watershed Work Plan for EPA and DOH

Introduction: Among the three priority watersheds, West Maui has the longest and fullest history of water quality impairment, scientific study, and modern management efforts. West Maui coastal waters, in various delineations and incarnations, have been a staple of the State's 303(d) list since its inception. Urbanization of West Maui coastal lands is ongoing, and extensive management measures have been implemented in agricultural uplands. Relationships between marine algal blooms, coral reef health, nonpoint sources of nutrients and sediments (particularly sewage effluent injection wells and urban and agricultural runoff), and flood control are an ongoing concern. West Maui's Honolua Bay is one of three priority watersheds in the State selected for development of local action strategies to address land-based pollution impacts on coral reefs. As population growth continues, it seems likely that urbanized portions of West Maui will become subject to NPDES MS4 regulations.

In December 2006, HIDOH and EPA identified the West Maui Watershed as a priority area for determining if water quality improvements have been achieved over the last decade and for working with the local watershed representatives to achieve water quality improvements by 2012. HIDOH responsibilities are to implement numerous environmental programs, especially under the Clean Water Act, focusing on water quality monitoring and assessment (to re-evaluate overall coastal water conditions and diagnose the transport and fate in coastal waters of pollutants from wastewater sources) and watershed analysis (to characterize pollutant sources and identify the scope and impacts of land use change and agricultural management measures). EPA responsibilities are to provide funding, technical assistance, and training for monitoring and assessing coastal waters and for performing watershed analyses. This work plan identifies the actions that EPA and HIDOH will take to better support the local watershed efforts to achieve water quality improvements by 2012.

The West Maui Watershed Management Project, a four-year community effort funded by HIDOH, EPA, and NOAA, provided the foundation for ongoing management efforts that are believed to effect water quality improvements. Maui County, West Maui Soil and Water Conservation District, private landowners, the U.S. Geological Survey, the University of Hawaii, and other partners have been continually building on these efforts to address numerous issues affecting watershed health. Synthesizing the large amounts of information available and determining what new information is needed to answer questions about relationships between watershed management and watershed health is the major challenge presented in West Maui. In order to make this challenge more manageable, HIDOH and EPA recently delineated a smaller Kahana open coastal waters assessment decision unit to serve as the initial focus of this work plan.

Expected Outcomes for the West Maui Watershed:

- Improvement in estimated load reductions and baseline water quality by 2012
- Partial restoration of water quality, defined by a delisting of one pollutant in at least one waterbody in the watershed by 2012

Performance Measures for activities in the West Maui watershed:

- Completion of Wastewater and Nutrient source Tracking reconnaissance mapping in West Maui coastal waters (see Attachment 4, Activity 1)
- Completion of a monitoring design workshop and selection of a monitoring approach for reassessing of water quality conditions in the Kahana open coastal water assessment decision unit (see Attachment 4, Activity 2)
- Reassessment of water quality conditions in the Kahana open coastal water assessment decision unit

- If warranted by assessment results, prioritization of Kahana watershed for TMDL development
- Implementation of on-the-ground projects (structural BMPs) focused on water quality improvement
- DOH/EPA funding of polluted runoff control implementation, including county and state agency participation (FY 09/10 CWA 319 funds will be targeted to West Maui and other priority watersheds)

PRIORITY WATERSHEDS – Integrated Priority Tasks for FY2011-FY2012 – WEST MAUI						
West Maui						
Program Element West Maui	**Program Objective/Outcome**	**Task/Output**	**Target Schedule**	**Responsible Section, Staff, or Collaborating Organization**	**Funding Resources**	**Actual Completion Date**
Monitoring	Assess water quality of West Maui	Conduct sampling and analysis of coastal waters of the West Maui watershed.	Aug/Sept 2010	CWB Monitoring	Federal 106 MI $11,000	Sept 2010
	Ensure water quality is protected for drinking water sources or systems within the West Maui watershed area.	Conduct routine monitoring of drinking water sources or systems in the area to determine compliance with drinking water regulations under the SDWA.	December 31, 2008	SDWB Monitoring/ Water suppliers		
	Determine groundwater quality in the West Maui watershed area.	1. Complete development of the Groundwater Monitoring and Assessment Strategy. 2. Conduct groundwater monitoring in the West Maui watershed area according to the Strategy.	June 2008	SDWB- Groundwater Protection Program		
Permitting	Ensure NPDES and UIC permits remained current.	None for this period.				
TMDL	Complete TMDL development for all impaired waterbodies throughout West Maui watershed.	Establish new Assessment Decision Units (ADUs) for all waterbodies in West Maui watershed and input to ADB records.	FY08	CWB EPO		Kahana Open Coastal Water ADU established
		Complete scoping process for listed waters/waterbody inventory, scoping report, field sampling plan (explain how to establish loading capacity and load allocations for each ADU and links with WLAs).	To be determined	To be determined		
		Collect field data for coastal waters, and prepare and complete EHA database records.	To be determined	To be determined		

PRIORITY WATERSHEDS – Integrated Priority Tasks for FY2011-FY2012 – WEST MAUI						
West Maui						
Program Element West Maui	**Program Objective/Outcome**	**Task/Output**	**Target Schedule**	**Responsible Section, Staff, or Collaborating Organization**	**Funding Resources**	**Actual Completion Date**
TMDL and Watershed-Based Implementation	Reduce pollutant loads to restore impaired waterbodies in the West Maui watershed area. Assess effectiveness of implementation measures.	1. Develop and complete basic TMDL and watershed-based implementation plans for West Maui coastal waters. 2. Implement measures to reduce pollutant loads.	To be determined	EPO, CWB (ENG, PRC)		
		Review NPDES inspection plans to ensure consistency with objectives of the TMDL Implementation Plans and their effectiveness.	Ongoing	CWB (ENF, ENG, PRC) EPO		
		Develop and provide recommendations of WLA implementation conditions for reissuance of NPDES permits.	Ongoing	CWB (ENF, ENG, PRC) EPO		
Polluted Runoff Control	Achieve water quality improvement through 319(h) supported projects and CZARA implementation projects, as appropriate.	Identify potential projects, based on completed TMDLs, TMDL implementation plans, and watershed-based plans.	To be determined	CWB (PRC) EPO		
		Develop watershed implementation workplans for State use.	Ongoing	CWB (PRC)		
		Target available funding and resources to prioritize implementation activities identified in watershed-based plans and TMDLs.	FY09-10 RFP	CWB (PRC)		
		Probabilistic monitoring of coastal waters associated with the Kahana watershed consistent with plan developed December 2008. Coordinate discussions between Monitoring Section and EPO and select the best monitoring and data collection approach to assess water quality baseline conditions and potential improvements as a result of the project implementation efforts.	Initiate sampling July/August 2010 Ongoing; linked to Comp. Monitoring Strategy	CWB (MON, PRC) EPO CWB (MON, PRC) EPO	MI Funds	September 2010
		Identify watershed training/technical assistance needs for developing and implementing watershed-based plan.	As needed	CWB EPO WWB SDWB		

NARRATIVE

Overview:

The Clean Water Branch (CWB) and Environmental Planning Office (EPO) have undertaken two modifications to the Base 106 grant: convert the grant to a 2-year grant period and integrate the grant workplan with the CWA 604(b), Water Quality Management grant. In addition, at the request of the Hawaii Deputy Director for Environmental Health, an Executive Summary is included in the grant submittal in an effort to highlight both State and Federal Priorities and focus all water efforts on a watershed basis.

> 2-Fiscal Year (FY) Grant Period: Prior to the FY09/10 work plan, the Base 106 grant was awarded and closed out annually. This timing made it especially difficult for the EPO to process and complete work on contracts. This grant submittal will cover the FY 2011-FY 2012 (10/1/10 to 9/30/12) period.
>
> Integrated Workplan: In FY 2011 and FY2012, the 604(b) grant workplan and the BEACH grant workplan will be integrated with the Base 106 workplan. It should be clarified that due to the time periods of these grants, separate grant applications will be submitted.

Federal funding is incrementally decreasing to the State and creative approaches need to be taken to make the best use of funds against the numerous priorities facing the programs. This may mean that fewer contractors are utilized or the scope of their work is curtailed due to cost. These challenges face the programs in the future.

For FY 2011 and FY2012, the CWA Section 106 grant Water Pollution work plan focuses on Permitting, Enforcement and Water Quality Monitoring.

Permitting:

FY2011 and FY2012

The NPDES and WQC Programs have been directed to give high priority to projects included on the American Recovery and Reinvestment Act (ARRA) of 2009 list, Governor's Capital Improvement Project (CIP) Strike Force List, and Renewable Energy List. Another priority for the Permitting program will continue to be the issuance of backlogged major and minor permits. In addition, the Permitting Program will be amending and compiling the Hawaii Administrative Rules to include Federal Regulations for the Concentrated Animal Feeding Operation, Pesticide General Permit, and Construction General Permit, and re-adoption of the 11 NPDES General Permits. The Water Pollution Control (WPC) System to manage information used by the CWB Permitting and Compliance programs will be implemented to streamline the permit issuance process. The Environmental Health Administration e-Permitting portal to receive online electronic applications and payments will be

designed and developed to further streamline the permit issuance process.

Enforcement and Compliance:

FY 2011 and FY2012

The priority for the Enforcement and Compliance Section will have 50% of major facilities, 20% of the minor facilities, and 10% of NGPC facilities inspected. The State will continue to follow-up on all active consent decrees which include: County of Maui, Hawaii Department of Transportation, and CCH consent decrees. On CCH sewage spills negotiation, the Enforcement Section shall work with its Attorney General on the next step which will include monitoring compliance when a settlement agreement is reached (completed August 10, 2010). Continue working on ICIS to allow the CCH and HECO to submit their Discharge Monitoring Report (DMR) data electronically (NetDMR) to the State via ICIS. The State is currently in the testing phase of NetDMR and hopes to go into production by the Summer of 2011 with six (6) Hawaiian Electric Company (HECO) facilities. After HECO, the State hopes to have two (2) of CCH's wastewater treatment plants using NetDMR production by Summer 2012.

Water Quality Monitoring and Assessment:

FY2011 and FY2012

Top priority of the Monitoring Program will be Beach Monitoring and Notification, West Maui Priority Watershed, and continued collaboration and support of our partners in activities shown in Attachment 1. Emphasis will be on working closer with Division of Aquatic Resources to the mutual benefit of both programs. Even though Oahu Monitoring staff were cut drastically, Monitoring section will keep up to date with all aspects of monitoring by attending meetings, presentations, seminars (Summer Staph Institute-JABSOM, Pacific Research Center for Marine Biomedicine-UH), conferences (National Beach Conference, Region 7 Surface Water Monitoring and Standards Conference, National Water Quality Monitoring Conference) and stakeholder meetings (Recreational Water Criteria stakeholder meetings), and other EPA sponsored meetings.

Total Maximum Daily Load (TMDL):

Completed TMDLs: TMDLs scheduled to be approved in FY-11 and FY-12 will set the stage for collaborative, all-party approaches to

completing remaining TMDLs in the Pearl Harbor watershed (Waikele Stream phased TMDL and three estuary TMDLs for the Pearl Harbor Lochs). Kaelepulu TMDLs will build upon the results of the completed wastewater indicator tracking survey, the watershed sanitary survey (in progress), watershed sediment yield analysis (in progress), and numeric target development (FY2010) to complete these TMDLs in FY11.

Ongoing TMDLs: Given the large uncertainties in the operative future of the Wahiawa Reservoir, Kaiaka Bay TMDL development will focus on the middle/lower reaches of Kaukonahua Stream, to establish water quality endpoints that can be used for assessing various Wahiawa Reservoir operational scenarios. For the Pearl Harbor estuary, DOH intends to focus on TMDL development for West Loch, since it seems to provide the greatest opportunities for implementation activities that would lead to measurable water quality improvements. TMDLs for the Hilo Bay Watershed remain on hold, pending the availability of staff time to craft previous contractor efforts into approvable TMDLs for the Waiakea and Alenaio streams, and the completion of various non-DOH scientific and management investigations of Hilo Bay and its tributaries.

Monitoring Activities: In FY-08 EPO entered a Direct Project Agreement with the Research Corporation of the University of Hawaii (Specialist for RCUH Water Quality Assessment Project). One objective of this project is to provide added in-house capacity for TMDL development. In FY-11/12, this includes field data collection for Wahiawa Reservoir/Kaukonahua Stream, Kalihi and Nuuanu streams, and the Kaelepulu inland waters system. It could also include additional monitoring activities that would fill data gaps identified in the process of designing a Hawaii TMDL toolbox, which is an ongoing initiative of EPO, CCH, and the University of Hawaii Water Resources Research Center (Prof. Chittaranjan Ray). EPO is also discussing the organization of a stormwater monitoring consortium with MS4 permittees and the University of Hawaii Water Resources Research Center, in order to provide more consistent and cost-effective stormwater data for water quality management purposes.

TMDL Implementation: Along with the completion of TMDLs in FY 2011-2012 comes the issue of utilizing the approved TMDLs in improving water quality. The CWB and EPO will continue to work with private and public interests to promote, encourage, and facilitate TMDL implementation and integrate appropriate environmental programs on a watershed basis to reduce pollutant loads, improve water quality, protect and restore ecosystem integrity, and delist impaired waters.

Water Quality Management / 604(b) grant:

The Water Quality Management Program is moved to Clean Water Branch. EPA encourages the careful weighing of CWA Section 604(b) and Section 106 Water Pollution Control program requirements to select the optimum mix of these funds that satisfies basic statutory requirements and provides state and local government with funding flexibility to most effectively support individual state programs. CWA Section 106 provides funds for management of programs for the prevention, reduction, and elimination of pollution. CWA Section 604(b) funds are eligible or recommended for:

- conducting ambient monitoring.
- developing, revising, and reviewing water quality standards.
- developing lists of impaired waters and meeting Total Maximum Daily Load (TMDL) planning requirements under CWA Section 303(d).
- developing Continuing Planning Processes (CPPs) as required under CWA Section 303(e)(2).
- preparing water quality inventories as required under CWA Section 305(b).
- supporting water quality program planning and development.[1]

HIDOH filled its long-vacant Water Quality Management Specialist position in January 2010, and revised the CWA Section 604(b) workplan for the FY2009 funding cycle (ends December 31, 2011) to focus on developing, revising, and reviewing water quality standards. The new Specialist is also assigned as lead staff for the Environmental Health Administration (EHA) Water Monitoring Governance Committee (see 5. below, Water Quality Monitoring Strategy). The CWA Section 604(b) workplan for the FY2010 funding cycle (ends December 31, 2012) continues the ongoing program emphasis on ambient monitoring, water quality inventories and lists of impaired waters, biological criteria for aquatic life uses, and TMDL planning.

Funding strategy: In FY-11 and subsequent years, CWB is funding all water program personnel costs (3 full-time and 3 part-time HIDOH staff participating in Water Pollution Control and Water Quality Management program activities) and most associated program expenses through the two-year CWA Section106 grant. This allows greater flexibility in contract management by making more contract funds available through multi-cycle CWA Section 604(b) grants. These contracts support basic administrative and planning functions and applied scientific investigations (for collecting and analyzing biological, chemical and physical water quality data). The results of the investigations are used to set appropriate water quality standards in Hawaii, develop assessment methodologies and decision criteria for evaluating standards attainment [and thus aid in the CWA Section 303(d) listing process], and to generally improve water quality planning, regulation, and restoration activities throughout the state. Priority management activities are identified through consultation with other environmental programs within HIDOH, with other State and federal agencies, and through various avenues of public participation. Tasks are undertaken if they are consistent with the goals and objectives of the EHA, and support State efforts to address current EPA Performance Measures.

[1] Office of Water. 1994. FY1995/1996 Sections 106/604(b) Eligibility, Negotiation, Award, and Oversight Guidance. March 31, at pp. 1-2; Appendix A, p. 1.

Priority Tasks:

1. **Amend Water Quality Standards** (marine recreational criteria and toxic pollutant criteria)

   In response to a legislative proposal introduced on behalf of the City & County of Honolulu, HIDOH provided testimony that resulted in the 2009 enactment of revisions to marine recreational criteria and toxic pollutant criteria (human health/fish consumption). HIDOH will (a) develop additional information about the appropriate fish consumption rate for calculating the toxic pollutant criteria, (b) hold additional public hearings on the legislated revisions, and (3) submit and administrative amendment package for Governor's approval.

2. **TMDL Planning -** please see Total Maximum Daily Load discussion at the top of this NARRATIVE section.

3. **2012 Water Quality Monitoring and Assessment Report** [CWA 305(b)/303(d) Integrated Report]

CWB will lead the Water Quality Monitoring and Assessment reporting process, including data mining and data collection; assessment methodology review; decision unit delineation; data analysis; report writing and production; public review of proposed decisions; response to comments; submittal to EPA; ADB data entry of assessment decisions; and administrative recordkeeping.

4. **National Hydrography Dataset Stewardship**

CWB will provide lead staff support to the multi-agency Hawaii National Hydrography Dataset Stewardship. The Stewardship focus is to process edits and additions to the existing national dataset that are recommended or requested by Stewardship partners and data users; provide technical support and training to users; and build Stewardship capacity for creating and distributing a state-level dataset that incorporates important features for state users which cannot be archived in or distributed by the national system.

5. **Water Quality Monitoring Strategy**

CWB will provide lead staff support to the EHA Water Monitoring Governance Committee for updating the Water Quality Monitoring Strategy and for designing, proposing, and conducting tactical campaigns to achieve strategic objectives.

6. **Basic Data Collection**

Basic water quality data supporting scientific investigations of water quality standards (including revisions, attainment, pollutant loading, fish tissue toxicity, and biological criteria development) is obtained with in-house resources (including State Lab Division), contracts with various agency and private partners (including the Research Corporation of the University of Hawaii, University of Hawaii, and U.S. Geological Survey), and collaborative interagency, community-driven, and volunteer efforts.

7. **Participate in the BiAnnual Meetings with EPA Program Officers.**

II PROGRAM WORK PLANS

A. Federal Grant Administration - CWA 106 (Surface Water)

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Federal Grant Administration	*Timely award of federal grants*	*1) Draft work plan, consistent with proposed outcome format*	*April 2011, 2012*	CWB-A. Wong	
		2) Grant negotiations	*May 2011, 2012*		
		3) Approved final grant application, work plan to EPA	*June 2011, 2012*		
		4) EPA award of grant	*w/in 30 days of fund availability*		
	Timely submittal of reports on workplan accomplishment and program outcomes ***Outcome:*** *Reports will be used to document satisfactory progress and issues needing further attention and funding in the next years work plan.*	*1) Quarterly and annual reports on all program outcomes and work plan activities (per specific program requirements)*	*Dec., March, June, September 2011, 2012*	All ERO/EMD & EPO (Manager/Sec)	FY11 Fiscal Sheet Page 1 of 21
		2) Interim/Final FSRs within 90 day grant expiration.	*Nov. 2011, 2012*	ERO	
		3) Specific Program Reporting to be added for each program.	*Annually, Dec. 31*	CWB/EPO staff	
		4) Financial Terms and Conditions Reports, as appropriate.	*Annually, Dec. 31*	ERO	

B. NPDES Permits - Funded under CWA 106

Goal 2: Safe and Clean Water - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

Objective 2.2: Protect Water Quality - Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.

Subobjective 2.2.1 Protect and Improve Water Quality on a Watershed Basis - Number of the Nation's watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2,262 watersheds nationwide)

State Program Indicators (To be added by State)

HI PROGRAM OBJECTIVE NO. 1 Control point source discharges through the issuance of appropriate NPDES permits to maintain the beneficial uses of the State receiving waters.

HI PROGRAM OBJECTIVE NO. 2 Certify that Section 404 permitted activities will not adversely impact the beneficial uses of the State receiving waters.

EPA/State Core Performance Measures	CWB Strategic Plan - Program Performance Objectives/Measures	Target	Due Date	Result, Date Done, Comments
Permitting Program Outcome/Output Measures	A. NPDES permit program: 1. Report # of individual NPDES permits issued. 2. Report # of Notices of General Permit Coverage (NGPCs) issued.	A.1. See Attachment 2 A.2. Varies with number of applicants	Quarterly	
Permitting Program Outcome/Output Measures	B. COE 404 permitted activities do not impair designated uses. 1. Report # of 401 WQCs certifications issued, waived, or denied.	B.1. Varies with number of applicants	Quarterly	

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Permitting	Control point source discharges through the issuance of appropriate NPDES permits in order to maintain the beneficial uses of State receiving waters **Outcome:** 90% or more of Hawaii's NPDES permits will be current	FY11 Reissue ten (10) majors and fourteen (14) minors individual permits according to 5-year schedule (See Attachment 2) FY12 Reissue six (6) majors and ten (10) minors individual permits, and eleven (11) general permits according to 5-year schedule (See Attachment 2) Any permit still under development at end of previous fiscal year will be issued or reissued.	9/30/2011 9/30/2012	CWB-Engineering Section	FY11 Fiscal Sheet page 1
	To issue and update individual and general NPDES permits	See Attachment 2 for FY 2011-12 Update 5 year plan in Attachment 2 annually Maintain and update inventory of industrial activities Develop and maintain a data base of industrial facilities claiming conditional "no exposure" exclusion from obtaining a storm water permit.	9/30/2011		
	Public Notification	Provide public notification of construction storm water Notices of Intent for projects greater than 20 acres on the island of Hawaii in the Clean Water Branch's WEB site at http://hawaii.gov/health/environmental/water/cleanwater/pubntcs/index.html			
	Wastewater Sludge	The State will add the agreed-upon sludge "boilerplate" monitoring/reporting language to all reissued NPDES permits and will also add, when requested and provided by EPA, specific language on a case-by-case basis.	As required		
	Public Notification	In addition to issuing Notices of Proposed Permit Issuance for individual permits and individual 401 Water Quality Certifications in the newspapers of the County where the discharge is located, the State will provide public notification in the Clean Water Branch's WEB site at: http://hawaii.gov/health/environmental/water/cleanwater/pubntcs/index.html			

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
	CAFO inventory	The State will update its AFO/CAFO inventory and permit CAFOs that are identified as having discharges to State waters. In addition, all permitted CAFOs will be required to have nutrient management plans and other applicable management measures as required in the effluent guidelines.	As required		
	Sec. 401 Water Quality Certification	The State will continue to implement a State Section 401 Water Quality Certification Program for applicants required to have a federal permit or license to construct in waters of the State.	As required		
	Develop and Implement HI-NPDES Database which will be compatible with EPA ICIS-NPDES system The HI-NPDES database will provide a mechanism for more effective management of the NPDES program. It will support all business areas of the NPDES program, including the following: ■ Permitting (Tracking and Issuance) ■ Compliance Monitoring ■ Program Management (Compliance Determination) ■ Enforcement (Administrative, Criminal, and Judicial) The HI-NPDES database will allow electronically submission of NPDES application, DMR and potential automatic electronic transmittal of data to EPA ICIS-NPDES system. The HI-NPDES database will provide for better QA/QC of data input and tracking.	Develop program management database (FY11) Develop enforcement database (FY11) (See attachment 5 for details)	October 2010 to September 2011 October 2010 to September 2011	CWB	Federal 106 - $60,854(FY11) Supplemental 106 - $106,600(FY11)
Data Quality	Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revision to the QAPP if any, follow the Quality Management Plan (QMP).	An update by 5/1/11 Final QAPP to EPA by 12/1/11	CWB	

C. Monitoring - Funded under CWA 106

Goal 2: Safe and Clean Water - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

Objective 2.2: Protect Water Quality - Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.

Subobjective 2.2.1: **Protect and Improve Water Quality on a Watershed Basis** - Number of the Nation's watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2,262 watersheds nationwide)

PROGRAM OBJECTIVE NO. 3 Enhance the ambient Water Quality Monitoring Program to identify impaired bodies and restore their beneficial uses.

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Emergency Response, Public Safety, and Surveillance Monitoring	Protect the people of Hawaii and the environment through an appropriate WQ monitoring and warning system. Public health and safety will be served and the environment will be protected.	1. Responses to treatment plant spills and bypasses and various other kinds of accidental or emergency discharge of pollutants to surface waters. 2. Respond to polluted runoff events. 3. Complaints Response and Enforcement: respond daily to citizens' complaints of water quality problems in surface waters. 4. 401 WQC Compliance Inspections: attend pre-construction meetings; conduct compliance inspections; respond to citizens' complaints on construction projects.	Ongoing	CWB Monitoring Section and Enforcement & Compliance Section State Laboratories-Environment Branch	Fiscal Sheet Page 1 of 21

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Core Monitoring of Surface Waters	Monitor core set of long term stations identified by the 1999 edition of the surface water Quality Management Plan (QMP) and water quality assays of Hawaiian coastal waters. (See Comprehensive Monitoring Strategy for the State of Hawaii) Sustained collection of historic water quality data in key locations.	Monitor core stations and major embayments on each island for the following parameters: Ammonia, Nitrate, Total N, Total P, Chlorophyll a, Silica, TSS Core stations are: Oahu: Kaneohe, Pokai Maui - Kahului Hawaii – Hilo Kauai - Nawiliwili and Port Allen Major embayments are: Kaneohe, Hilo, Nawiliwili, Port Allen, Kahului, and Pokai. Monitoring data collected at long-term monitoring stations will be entered into STORET/WQX monthly.	On hold due to reduction in force	CWB-Monitoring Section State Lab - Chem and Micro.	

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Data Analysis and Reporting	Utilize modern technology to further the integration and availability of environmental data to all customers of DOH data. All customers of DOH data will have easy access to information.	1a. DOH will submit the FY08/10 Integrated 303(d)/305(b) Report. - Public review of draft report - Final report	draft completed in house review 2/25/2011, Public review 3/7/2011, Final by 4/1/2011	CWB/ EPO - EHS IV	Federal
		1b. DOH will submit the 2012 Integrated 303(d)/305(b) Report. - Public review of draft report - Final report	Call for Data closes 6/30/2011 Draft by 1/15/2012 Public notice by 2/15/2012 Close comment period by 4/1/2012, Submit final by 4/30/2012		Federal: 4- person months State: 3
		2. STORET data management input/output of data on all watershed projects, TMDLs, Integrated Report, etc.	Quarterly	CWB	
		3. NHD stewardship will edit high-resolution NHD data for Hawaii, which is available via USGS website. Phase I – NHD high resolution maintenance lite by sub-region Phase II-NHD high resolution maintenance lite II by sub-region	Phase I completed Oct 2010 Phase II – Sept 30, 2011	RCUH-Geospatial Information Specialist	$31,632 (FY11) FY09 604(b) ARRA $31,632
		4a. Input 2008 and 2010 Integrated Report entry in ADB. 4b. Input 2012 Integrated Report entry in ADB.	12/30/2011 12/30/2012	RCUH-Geospatial Information Specialist	

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Data Quality	1) Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revisions to the CWB QAPP follow the Quality Management Plan (QMP). Respond to May 2010 review by EPA QA Office of draft CWB QAPP. Final CWB QAPP to EPA	Ongoing, or as required 5/1/2011 12/1/11	CWB CWB CWB	
	2) Update EPO quality assurance plan to provide framework and procedures for all surface water monitoring activities	Test, refine, and implement SOPs and other quality assurance and quality control guidelines for EPO surface water data collection and data management activities, including: a. Watershed assessments and stream surveys; b. Water column, bed sediment, and fish tissue sample collection; c. In-situ water column sampling using multi- and single-parameter instruments; d. Automated water column sample collection; e. Stream flow measurement, including volumetric method, floating object method, cross-section/velocity method, and stage/discharge analysis; f. Stream habitat assessment using the USDA-NRCS Hawaii Visual Stream Assessment Protocol; g. Stream biological assessment using the Hawaii Stream Research Center Stream Bioassessment Protocol; h. Electrofishing for fish census; i. Spatial data collection j. Data entry into EPO databases and STORET Respond to any comments resulting from EPA QA Office review of draft EPO QAPP.	Ongoing Two months after EPA review of draft EPO QAPP	EPO RCUH-Water Quality Assessment Specialist EPO	EPO: 4 person months - EHS IV

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Watershed Assessments	Collect and assess data on a watershed basis in an effort to determine sources of watershed pollution and develop means to improve water quality. Improved water quality by watersheds.	Analyze existing and readily available surface water data and related information (e.g. complaints, spills, inspections), waterbody assessment priorities and listing criteria, and DOH program capabilities to prepare recommendations for: a. Water quality sampling by the CWB Monitoring and Assessment Section and EPO; b. Bed sediment and fish tissue sampling and fish risk assessments conducted by EPO, HEER, and CWB; c. Assessments of stream habitat quality and biological integrity by EPO. d. Water quality sampling (surface and ground) and SWAP enhancement to address Clean Water Act and Safe Drinking Water Act integration measures. e. Achieving other assessment goals and objectives through volunteer monitoring, grantee monitoring (e.g. 319 projects), compliance monitoring (e.g. 401, NPDES, and SEP conditions), and third-party independent monitoring (e.g. academic and scientific research)	Ongoing	CWB/RCUH - Water Quality Assessment Project CWB Monitoring Section State Lab.- Chem and Micro.	Federal: 4 person months
	USGS Bioassessment in Maui	Overall objective of this 2 year study is to provide the HDOH with new tools needed to assess the biological condition of streams in Hawaii. The new assessment tools will be based on benthic invertebrates and will be applicable to both targeted and probabilistic monitoring designs employed by the HDOH Environmental Planning Office and Clean Water Branch.	February 2011	EPO	USGS Contract $19,000 FY11 (MI)
Community Involvement	Utilize community and regulated community input in developing environmental goals, objectives, statutes and rules to ensure that the public is educated, aware, and in synch with the environmental management programs.	Conduct public outreach and education activities to promote waterbody monitoring and assessment, data quality, and comparability of data with State water quality standards, and assist other DOH programs, government agencies, scientists, schools, community groups, and individuals with surface water data collection, analysis, and interpretation Work with already existing organizations that affect policy (neighborhood boards, community association) to ensure public input. Promote Leadership in Energy and Environmental Design (LEED) programs and community-based social marketing.	Ongoing	EPO (Public Participation Coordinator, TMDL Coordinator, EHS IV) CWB (Monitoring, Enforcement, PRC)	

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
TMDL Development and Approval FY11 TMDL Submittals (see Attachment 3, Table 1. for details): <u>Kaelepulu inland waters:</u> Draft/Public Notice Final <u>Pearl Harbor Streams:</u> Waiawa, Waimano (Middle Loch) Draft/Public Notice Final Kalauao, Aiea, and Halawa (East Loch) Draft/Public Notice Final	Completion of TMDLs to provide scientific basis for load Allocation (LA) and Waste Load Allocation (WLA) that must be implemented to achieve WQS. All data collected for TMDL development will be entered into STORET or another appropriate electronic format.	1. HIDOH contract with RCUH for Water Quality Assessment Project. Project Specialist works with Assessment Coordinator (EPO), and TMDL Coordinator, to support development of water quality standards, assessment of water quality impairments and Priority TMDL Development (See Attachment 3 and CWA 604(b) workplans).	09/11	EPO	$ 67,914 (FY11)
		2. DOH contracts for data collection, data analysis, water quality modelling, and data management (database refinement) to support assessment of water quality impairments and development and implementation of TMDLs (including Kalihi Stream, Nuuanu Stream, Wahiawa Reservoir, Kaukonahua Stream, Hanalei, Kaelepulu, Pearl Harbor West Loch)	09/11 09/12	EPO	$ 4,238 (FY11) 604(b) $ 28,015 (FY09) 604(b) $ 43,363 (FY10)

Water Quality Standards - Funded under CWA 604(b)

Goal 2: Safe and Clean Water - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

Objective 2.2: Protect Water Quality - Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.

Subobjective 2.2.1 Protect and Improve Water Quality on a Watershed Basis - Number of the Nation's watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2,262 watersheds nationwide)

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Water Quality Standards	-Amended Water Quality Standards (marine recreational criteria) approved by EPA -Update the basic water quality criteria for toxic pollutants (HEER role for fish consumption criteria as well as ecological criteria). -Continue efforts to more explicitly link use attainment with criteria attainment through the development of use-based assessment methodologies and decision criteria. -Develop the strategic plan for development of Biocriteria for inland and marine systems by first targeting marine corals and inland waters. -Conduct internal, intergovernmental, and public education/outreach about the meaning and application of the WQS	Execute contracts to develop supporting technical rationales, conduct WQS Advisory Meetings, complete final amendments for approval by EPA, and conduct fish tissue sampling to support fish consumption advisory decisions.	FY11-12	CWB EPO HEER	604(b) $ 61,204 (FY09) 604(b) $ 43,363 (FY10)
Water Quality Monitoring and Assessment	2008 and 2010 Integrated Report 2012 Integrated Report approved by EPA		Draft by March 2011 FY12	EPO CWB	604(b) $ 43,363(FY10)

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
EPO Water Program Support	Provide administrative and technical reports and services in support of the EPO water program	Develop and implement a Data Management and Analysis System to support Integrated Report production with one or more of the following components: • Data mining and retrieval • QA/QC • Georeferencing (NHD) • Computational routines for assessment decisions • Tracking and reporting assessment decisions via ADB • Generating statistical information for the Integrated Report	Ongoing	EPO RCUH Water Quality Assessment project	

D. Compliance/Enforcement/Inspections - Funded under CWA 106

Goal 5: Compliance and Enforcement Stewardship – Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship.

Objective 5.1: Improve Compliance.

Sub-objective 5.1.3 Monitoring and Enforcement.

HI Program Objective No. 4 Ensure expeditious compliance with State Water Pollution rules.

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
General Compliance	Achieve compliance rate of 98% for NPDES facilities	Implement the State's Annual Inspection Plan. Track and evaluate NPDES reported self-monitoring. Take timely and appropriate enforcement action against violators	Ongoing.	CWB-Enforcement and Compliance Section, Attorney General's Office	**Fiscal Sheet Page 1 of 21**
Data Quality	Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revisions to the QAPP follow the Quality Management Plan (QMP). Respond to May 2010 review by EPA QA Office of draft QAPP. Final CWB QAPP to EPA	Ongoing, or as required 5/1/2011 12/1/2011	CWB CWB	

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
ICIS-NPDES	To perform data input into ICIS-NPDES in accordance with the procedures outlined in the 1985 OCS Quality Assurance Guidance Manual, and the December 28, 2007 ICIS Addendum to Appendix G of the PCS Policy Statement defining the minimum ICIS-NPDES data elements comparable to PCS WENDB and other system-required ICIS-NPDES data elements.	(1) Enter timely and accurate for all NPDES applications and permits consisting of all applicable information from enforcement orders issued by the DOH. (2) Enter NPDES inspection information for inspections conducted by the DOH. (3) Enter effluent limits, monitoring and report requirements for NPDES permittees. (4) Generate and distribute "preprinted" Discharge Monitoring Reports (DMRs) for permittees. (5) Enter timely and accurate NPDES DMR data as reported on the DMR forms by NPDES permittees. (6) Enter and maintain data for General permits and enrollees (new NOIs). (7) Meet the new data requirements for ICIS-NPDES including non-major, CAFO and SSO data. (8) Generate the automated QNCR report. (9) Regularly perform QA checks for DMR data completeness on ICIS and follow up on missing data as needed. Report to EPA quarterly on DMR data completeness in ICIS-NPDES. (10) Participate in EPA ICIS-NPDES workgroups. (11) Participate in annual ICIS-NPDES meetings and trainings. (12) Enter into ICIS-NPDES applicable WENDB data for each formal or informal enforcement action taken against major and minor NPDES facilities, NGPC enrollees, and non-filers. (13) SEV Single Event Violation data entry reporting, Informal enforcement action data entry reporting	(1): Within 15 days of receipt. (2): Within 30 days of the inspection. (3): Within 15 days of permit effective date. (4): As necessary to keep permittees supplied. (5): Within 15 days of receipt. (6,7): Ongoing, or as required (8): Within 45 days of the end of the calendar quarter. (9): Concurrent with the QNCR. (10,11): Ongoing, or as required. (12): within 30 days of issuance of enforcement action.		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	Development of an Annual Inspection Plan to identify compliance problems. Region 9 may consider revising the measure of the State's inspection accomplishments if DOH demonstrates that extraordinary or unexpected circumstances prevent it from being able to carry out its workplan requirements. DOH will explain in detail such circumstances in writing. Such circumstances might include emergency response activities, work on major enforcement cases, or other reductions in staff available to carry out the required inspections.	(1) Develop an inspection plan that is based on the state's environmental priorities and conforms with EPA's Compliance Monitoring Strategy (2/28/08). The plan shall provide that: A) For FY11 50% of the major facilities (9 facilities), at least 20% of the traditional minor facilities (6 facilities), at least 10% each of the total industrial storm water general permits enrollees (NGPC Appendices B (15 facilities) &C Phase I (60 facilities)), at least 5% each of the total storm water construction Phase II enrollees (20 facilities); the two (2) major MS4s are to be assessed once during the permit cycle, and the nine (9) minor MS4s are to be inspected during the permit cycle. One (1) major MS4 will be inspected in FY11 and three (3) minor MS4 will be inspected. B) All of the individual NPDES and all NGPC enrollees (Appendices A-I) located within the Waimanalo, Hanalei, and West Maui (Kahana) watersheds will be inspected; C) A significant number (more than 50%) of the CEIs and CSIs to be conducted on major and minor permits shall be unannounced; D) Follow-up inspections are not to be counted towards the State's totals; however, the inspections will be entered into ICIS-NDPES. Inspections of traditional minor facilities shall be timed to be completed approximately 6 months before the NPDES permits are issued/renewed. Inspections shall be prioritized in the priority watersheds. All inspections performed in a designated priority watershed shall be noted/tracked in ICIS-NPDES. The inspection plan shall be submitted as an MS Excel spreadsheet that identifies, for each universe of inspection required under the CMS, the number of proposed inspections. Incorporate pollution prevention/waste minimization activities into inspections.	FY11 October 15, 2010 FY12 October 15, 2011		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	To verify compliance with all active NPDES permits, consent agreements and decrees.	(2) CCH and Maui County consent decrees: Inspect as needed to determine compliance with the consent decree. (3) NPDES inspections will include, but not be limited to, the following activities concerning compliance with permit limitations and conditions: a) Verification of record keeping and reporting as outlined in Section 3 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014). b). A physical inspection of the facility, including unit processes and operations and receiving water observations, as outlined in section 4.B of the NPDES Compliance Inspection Manual (EPA 300-B-94-014). c). An evaluation of operations and maintenance programs as outlined in section 4.C of the NPDES Compliance Inspection Manual (EPA 300-B-94-014). d). An evaluation of facility compliance sampling activities, including: adequacy of sampling, methodology and locations; sample preservation, containers and hold times; flow measurement; and compositing techniques, as outlined in sections 5 and 6 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014). e). An evaluation of laboratory procedures (or verification of current lab certification) and laboratory quality assurance procedures (if analyses are done on site), as outlined in Section 7 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).	On going, as required On-going, as required		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	Inspection Reports	(4) The inspection reports will discuss the findings related to all of the above activities and the field inspection notes will support all of the inspection report findings. (a) Inspection reports shall be sent to EPA within 30 days of the inspection date, and shall be accompanied by a copy of the report transmittal letter to the permittee. Applicable WENDB data will be entered into ICIS-NPDES within the same time frame. (b) DOH shall report to the EPA after the end of the each quarter the following information relating to inspections conducted in the quarter: (1) Identification of by name, permit number, permit type [i.e. major municipal, major non-municipal, major Federal, minor, construction storm water Phase I and Phase II (NGPC Appendix C), or other industrial storm water (NGPC Appendix B], and date of each NPDES facility inspected in the quarter; Also identify, by watershed, inspections conducted for NGPC facilities in either the Waimanalo, Hanalei, and West Maui watersheds. (2) For each of the above indicated inspections indicate which were announced, unannounced, and whether inspections included sampling (3) Copies of the inspection reports are to be included in the quarterly reports. (4) Copies of quarterly reports are to be e-mailed to Region 9, CWA Compliance Office.	4(a) Ongoing, within 30 days of date of inspection. 4(b) Quarterly, with a report due by the 15th of the month following the quarter		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	EPA Contract Services	(5) In lieu of Section 106 surface water funds, Hawaii DOH requests in-kind assistance from EPA in the form of contractor services to conduct compliance inspections of select POTWs and industrial facilities. It is more time-efficient for EPA rather than the State, to procure these contractual services. Time consuming joint enforcement actions prevent DOH from conducting these inspections. ($50,000 in FY11). Inspections conducted by contractors to the State will count towards the State's totals.	Propose list of candidate inspections to EPA by 12/31/10. Complete all inspections by 6/1/11. All draft inspection reports to be submitted by the contractor to DOH by 6/30/11. All final inspection reports shall be transmitted to the facility (with copies to EPA) by no later than 9/30/11.	CWB Enforcement Section	$50,000 (FY11) EPA in-kind assistance Refer to CWB Budget Details-Federal Funds (Budget Sheet #15)

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Compliance Assurance	To achieve and maintain high levels of compliance in the NPDES program to be tracked through ICIS-NPDES	(1) Prepare Quarterly Non-Compliance Reports (QNCR) via ICIS-NPDES for major dischargers. (a) No permit will remain in non-compliance for the same violation on two consecutive QNCR without: being returned to compliance, or Having timely and appropriate formal enforcement action taken against them consistent with the DOH enforcement procedures manual and penalty policy.	Within 45 days of the end of each quarter		
		(2) Prepare quarterly list of other minor discharges that are in SNC.	(2) Within 45 days of the end of each quarter		
		(3) Review Discharge Monitoring Reports (DMRs) for accuracy and violations. All DMRs will be reviewed within 30 days of receipt.	(3) On-going, as DMRs are received		
		(4) Identify and list all major and minor NPDES facilities/permits	(4) Dec. 30		
		(5) Assist EPA in reviewing deliverables from the CCH and Maui County consent decrees. Conduct appropriate follow-up activities as indicated by collection system evaluations conducted to date; Initiate appropriate responses to reported sewage spills	(5) As stipulated in the consent decrees		
		(6) Prepare and submit to Region 9 a response to EPA's quarterly Facility Watch List, as applicable and consistent with program guidance and SOP's	(6) Within 30 days of issuance of the Watch List to the State		

Enforcement	1) To provide for the issuance of timely and appropriate enforcement orders and penalties required to achieve and maintain compliance consistent with DOH enforcement procedures and penalty policy. (2) To ensure compliance with all NPDES permits and active consent agreements and decrees.	1) Take timely and appropriate enforcement actions on all applicable violations according to the Enforcement Section's procedures manual as revised to pursuant to (1) above. Initiate or continue enforcement actions on the following priority matters: (a) Take timely and appropriate enforcement actions on all dischargers on QNCR and/or Watch List. (b) Continue to pursue formal enforcement actions against the following entities: Waimanalo Gulch Landfill (c) Continue to actively participate in the follow-up activities in the joint enforcement action against the City and County of Honolulu. (d) Develop and implement, in consultation with EPA, an initiative to identify and take formal enforcement action against unpermitted industrial storm water dischargers (non-filers). (e) Take action against permittees that have not participated in the DMR/QA Program for two years. All enforcement actions shall include assessment of an appropriate penalty, if any. (2) Refer to EPA for appropriate action cases where: (a) upon issuance of a State Notice and Finding of Violation and Order, the violator files for a hearing on the matter and its return to compliance will be significantly delayed pending such a hearing and (b) DOH resource limitations preclude a timely and/or appropriate enforcement response. (3) Incorporate pollution prevention projects into enforcement settlements where feasible. (4) Review deliverables and reports from all enforcement cases as required by the respective consent decrees and discuss adequacy with EPA.	(1 a-c): On-going or as required (i.e. QNCR/ Watch List (1d): By September 30, 2011 (1e): As appropriate, or by September 30, 2011 (2-4): On-going or as required		

Enforcement	(3) Reporting on compliance status and enforcement activities	(5) Report quarterly the total number of State equivalent actions to EPA Administrative Orders issued and the number issued to POTWs for not implementing pretreatment. (6) Report quarterly the number of major facilities addressed by formal enforcement actions against municipalities that are not complying with their schedules. (7) Report quarterly the active State civil case docket, the number of civil referrals sent to the Attorney General, the amount of civil cases concluded, penalties assessed and collected, and the number of criminal referrals. (8) Report quarterly the number of pretreatment State civil referrals sent to the Attorney General, the number of criminal actions filed in State courts, the number of State cases filed, and the number of administrative penalty orders. (9) Report to EPA on a quarterly basis the status of all cases/activities described in item (2) above.	(5-9): Within 45 days of the end of each quarter		
Enforcement		(10) Identify at mid-year and end-of-year, the number of POTWs that meet the criteria for Reportable Non-Compliance (RNC) and identify which of those POTWs have had action taken against them, which resolved the violation. Report each action taken: technical assistance, permit/program modification, or formal enforcement. Report the compliance status (RNC, resolved, pending, resolved) of each POTW as of the end of the year. (11) Enter into ICIS-NPDES applicable WENDB data for each formal enforcement action (equivalent to EPA Administrative Orders and/or Administrative Penalty Orders) taken against major and minor NPDES facilities, NGPC enrollees, and non filers.	(10): May 16, and Sept. 30 (11): within 30 days of issuance of enforcement action.		

E. Training and Technical Assistance - Funded under CWA 106

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Training and Technical Assistance	To assure appropriate training is available for CWB and EPO staff.	Attend the following meetings/workshops:			
		National Storm Water Coordinators Meeting (EPA)	'11, '12	CWB	FY11 State; $8,947 Federal; $40,303
		Annual Meeting of the Association of State and Interstate Water Pollution Control Administrator's (ASIWPCA)	'11, '12	CWB	
		Hawaii Water Environment Association Annual Meeting (HWEA)	'11, '12	CWB, EPO	
		Water Environment Federation's Annual Conference and Exposition (WEF)	'11, '12	CWB	
		State/EPA Grant Negotiations for next fiscal year	'11, '12	EPO, CWB	
		NPDES Permit Writer's Workshop	'11, '12	CWB	
		ICIS-NPDES Meeting/Training	'11, '12	CWB	
		Exchange Network National Meeting	'11, '12	CWB	
		Hawaii Conservation Conference	'11, '12	CWB, EPO	
		National NPS Monitoring Workshop	'11, '12	CWB, EPO	
		National Water Quality Monitoring Conference	'11, '12	CWB, EPO	
		National Hydrography Dataset Conference	'11, '12	CWB, EPO	
		National TMDL Conference	'11, '12	CWB, EPO	
		Other appropriate workshops, meetings, trainings, or conferences as recommended by EPA	'11, '12	CWB, EPO	

F. Public Participation - Funded under CWA 106

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Public Participation	To meet public participation requirements and regulations and ensure public input on programs.	Conduct public hearings on rule changes. Conduct public information meetings about proposed water quality assessment and TMDL decisions Convene work group/advisory group meetings about proposed rule changes, water quality monitoring and assessment methodologies, and TMDL development and implementation activities.	Ongoing Ongoing Quarterly	CWB/EPO EPO EPO	State- 3.0 Federal- 3.0 FY11 Federal 106 - $32,876 State - $8,887

ATTACHMENT 1 - Clean Water Branch (CWB) Monitoring Work Plan Beginning FY2011

Monitoring Overview

The goal of the monitoring program is to ensure that Hawaii's coastal waters are safe and healthy for people, plants, and animals, and to protect and restore the quality of Hawaii's streams, wetlands, estuaries, and other inland waters for fish and wildlife, recreation, aesthetic enjoyment, and other appropriate uses.

To pursue these goals, the CWB Monitoring & Analysis Section has heavily committed itself to Beach Monitoring in support of the BEACH Act of 2000, collaboration with Division of Aquatic Resources (DAR) staff in basic Water Quality Monitoring, work with the University of Hawaii, School of Earth Sciences and Technology in the EPA National Coastal Condition Assessment Program and Hawaii Ocean Observing System, and work with USGS in the development of Multi-tracer approach to Wastewater and Nutrient source tracking and its application at Kealekehe, Hawaii, and Kihei and Lahaina, Maui.

In January 2010, the Monitoring & Analysis Section lost 4 Oahu monitoring staff and 1 clerical. This loss has heavily impacted the Oahu Beach Monitoring Program. Only Tier 1 beaches are now monitored on Oahu. No staff members were lost on the neighbor islands, so Tier 1 and 2 beaches continue to be monitored. Complaint investigations on Oahu are now handled by the Enforcement & Compliance Section. Neighbor Island monitoring staff will still assist with complaint investigations on the neighbor islands.

CWB continues to collaborate with DAR, Department of Land and Natural Resources on issues of water quality and protecting Hawaii's aquatic resources. CWB and DAR has participated in numerous outreach activities (Salt Lake community Day, Manoa Elementary Environment Day, Noelani Elementary, Malama Manoa, Salvinia Clean UP, etc.). At a meeting in December 2009, on Maui with DAR, EPA Region 9 staff, NRCS, and other agencies, CWB committed to train DAR staff in water quality testing and DAR agreed to assist CWB in the West Maui Priority Watershed monitoring work in the late summer of 2010.

The University of Hawaii, School of Earth Sciences and Technology (SOEST) invited CWB to collaborate in the Hawaii Ocean Observing System (HiOOS). HiOOS is a component of the Pacific Islands Ocean Observing System (PacIOOS), which is one of 11 regional observing systems in the U.S. Integrated Ocean Observing System (IOOS). PacIOOS is being coordinated by the University of Hawaii, SOEST in partnership with the East West Center, and the University of Hawaii, Sea Grant Program with funding from NOAA. The goal of HiOOS is to seek accurate, timely and reliable information about the coastal and open ocean waters of the Hawaiian Islands.

The CWB is also working with the UH, SOEST in the EPA National Coastal Condition Assessment (NCCA) Project to take place in the summer of 2010. This national monitoring project purpose is to generate statistically valid reports on the condition of the Nation's water resources and identify key stressors to these systems. 50 randomly sites across the State will be sample and assessed for: water quality, Chlorophyll-a, sediment, benthic macroinvertebrate assemblage, habitat, bacteria and fish tissue.

CWB is collaborating with Dr. Tao Yan, UH College of Environmental Engineering on a WERF supported project *Concentration Dynamics of Fecal Indicators in Hawaiian Coastal and Inland Sand, Soil, and Water During Rainfall Events.* CWB intends to support and expand Dr. Yan's project with $150,000 from the Kualoa settlement.

CWB is also collaborating with Dr. Alexandria Boehm, Stanford University, College of Civil and Environmental Engineering on her project *Indicators of Tropical Recreational Water Contamination and Illness.* Dr. Boehm has completed 2 rounds of sampling and will be pursuing a National Science Foundation grant.

CWB has worked for several years on the development of multi-tracer approach to wastewater and nutrient source tacking with USGS. Elevated bacteria counts during beach monitoring at Kualoa Beach Park revealed non-operating septic systems at the restrooms of the park. A proof-of-concept approach was developed by USGS at Kualoa and the approach was used and refined at Kealakehe, Kona to determine if the effluent from Kealakehe WWTP is impacting Honokohau Harbor. The multi tracer approach was then used at Kihei and Lahaina, Maui to detect wastewater plumes from municipal injection wells in nearshore marine waters. The Kihei/Lahaina report was published by USGS in December 2009. A CWB supported suspended sediment study of Hanalei River at Hanalei, Kauai was also completed in September 2009.

CWB Monitoring has responded to unplanned but high priority monitoring issues and will continue to do so. During the 48 million gallons Waikiki sewage spill, monitoring was conducted at surf sites, and other areas to compliment the C&C of Honolulu bacteria monitoring. After the Waipa Dam Failure, monitoring sampled sediment and water in response to community concerns of toxic chemicals being washed into the stream and ocean. CWB Monitoring collaborated with USGS in monitoring effort to determine the fate of wastewater from Kealakehe Treatment Plant, Kona, Hawaii, in response to a complaint filed with EPA Headquarters.

CWB continues to collaborate with major recreational water stakeholders of Hawaii including: ILH and OIA High School coaches, trainers, and athletic directors, Canoe organizations (OHCRA, Hui Waa, and Na Opio), Surfrider Foundation Chapters (Oahu, Kauai, and Maui), Hawaii Visitor and Convention Bureau, Waikiki Improvement Association, and various environmental groups.

Other tasks performed by monitoring include: response to sewage spills from private sources, stream monitoring, TMDL, 401 WQC compliance inspections, watershed assessments, coastal monitoring, and special studies.

FIELD INSTRUMENT TESTS: Water samples will be collected by the CWB at each selected site during wet and dry seasons. The HydroLab® multi-parameter probe will be used; the instrument is capable of measuring temperature, pH, conductivity, and dissolved oxygen. For Beach monitoring: Hach® turbidity meter Model 2100P and HydroLab Quanta multi-parameter meter capable of reading dissolved oxygen, conductivity, salinity, pH and temperature.

DOH LABORATORY ANALYSIS: Water chemistry analyses are conducted at the DOH laboratory for physiochemical parameters listed in the State Water Quality Standards as well as silicate and ammonia nitrogen. Other analyses of interest (metals, toxics, bacteria) may be arranged on a case-by-case basis. Bacteria analyses to support the BEACH monitoring program are also conducted.

Water Quality Parameters

Field Analyses - Among the field analyses are the following:

- temperature
- pH
- dissolved oxygen
- oxygen saturation
- oxidation-reduction potential
- salinity
- turbidity
- conductivity
- light intensity PAR

Laboratory Analyses - Analyses conducted by the DOH laboratory includes the following:

- nitrate-nitrite nitrogen
- ammonia nitrogen
- total nitrogen
- total phosphorus
- silicate
- total suspended solids
- bacteria (enterococcus and clostridium perfringers)

STORET Data Management

The CWB will input all marine sampling data into STORET via WQX on a monthly basis. Windsor has been contracted to streamline and automate data submission to EPA with project completion estimated in late May 2010. Data submissions will continue on a monthly basis. The STORET repository will be the main source of data available to the public, and will also be the main source of marine data for the 305(b) and 303(d) reports. CWB maintains its own website which also has the capability for downloads of sampling data for the public.

ATTACHMENT 2 – NPDES Permit Issuance Schedules

PERMIT ISSUANCE SCHEDULE - FY-2011

First Quarter (October 2010- December 2010)

1.	Lanai Oil Company	HI 0020958
2.	Sunrise Capital, Inc.	HI 0021654
3.	Grove Farm Water Treatment Facility	HI 0021824

Second Quarter (January 2011 - March 2011)

4.	Waianae Wastewater Treatment Plant*	HI 0020109
5.	Pacific Shipyards International, LLC	HI 0020753
6.	Honolulu Generating Station*	HI 0000027
7.	Mahaulepu Quarry	HI 0021491
8.	City and County of Honolulu MS4*	HI S000002
9.	Gay & Robinson, Inc.	HI 0000116
10.	Yacht Harbor Towers AOAO	HI 0020346
11.	Kulaimano Wastewater Treatment Plant	HI 0020770
12.	Ameron Hawaii Kapaa Quarry	HI 0020796

Third Quarter (April 2011 - June 2011)

13.	Marisco, Ltd.	HI 0021786
14.	Wastewater Treatment Facility at Fort Kamehameha*	HI 0110086
15.	Shipman Generating Station*	HI 0000264
16.	Chevron Products Company Hawaii Refinery*	HI 0000329
17.	DOT-Highways MS4*	HI S000001
18.	Pearl Harbor Naval Shipyard & IMF Drydocks 1-4*	HI 0110230

Fourth Quarter (July 2011 - September 2011)

19.	Sand Island Wastewater Treatment Plant* (new appl coming)	HI 0020117
20.	Honouliuli Wastewater Treatment Plant* (new appl coming)	HI 0020877
21.	Maui Fresh Fish LLC Hatchery Facility (new)	HI 0021838
22.	Haleiwa Wells GAC Water Treatment Facility	HI 0021839
23.	Hawaii Oceanic Technology Inc – Ahi Aquaculture Project (new)	HI 0021840
24.	Honolulu Seawater Air Conditioning, LLC (new)	HI 0021842

*MAJOR FACILITIES

PERMIT ISSUANCE SCHEDULE - FY-2012

First Quarter (October 2011 - December 2011)

1.	Hawaiian Cement – Halawa Quarry	HI 0000558
2.	AES Hawaii Inc.	HI 0021130
3.	Kahe Generating Station*	HI 0000019
4.	Waiau Generating Station*	HI 0000604
5.	Waikiki Aquarium	HI 0020630
6.	Hilo Wastewater Treatment Plant*	HI 0021377

Second Quarter (January 2012 - March 2012)

7.	Agribusiness Development Corporation	HI 0000086
8.	Port Allen Generating Station*	HI 0000353
9.	Halfway Bridge Rock Quarry and Crusher	HI 0020842
10.	Oahu Schools Small MS4	HI S000003
11.	Marine Corps Base Hawaii-MS4	HI S000007

Third Quarter (April 2012 - June 2012)

12.	Maui Ocean Center	HI 0021504
13.	Kailua Regional Wastewater Treatment Plant*	HI 0021296
14.	Schofield Barracks Wastewater Treatment Plant*	HI 0110141
15.	Ameron Hawaii Sand Isaland Facility	HI 0021075
16.	PHNSY& IMF Dockside Chlorinator Units and Chlorinator/Dechlorinator Units	HI 1120801
17.	General Permit for Storm Water Discharges Associated with Industrial Activities	
18.	General Permit for Storm Water Discharges Associated with Construction Activities (1 Acre or more)	
19.	General Permit for Discharges of Treated Effluent from Leaking Underground Storage Tank Remedial Activities	
20.	General Permit for Discharges of Once Through Cooling Water Less Than One (1) Million Gallons per Day	
21.	General Permit for Discharges of Hydrotesting Waters	

Fourth Quarter (July 2012 - September 2012)

22.	General Permit for Discharges of Construction Activity Dewatering
23.	General Permit for Discharges of Treated Effluent from Petroleum Bulk Terminal Stations and Terminals
24.	General Permit for Discharges of Treated Effluent from Well Drilling Activities
25.	General Permit for Small Municipal Separate Storm Sewer System
26.	General Permit for Reclaimed Water Systems
27.	General Permit for Decorative Fish Ponds

* MAJOR FACILITIES

PERMIT ISSUANCE SCHEDULE - FY-2013

First Quarter (October 2012 - December 2012)

1.	Marine Corps Base Hawaii Kaneohe Bay Water Reclamation Facility*	HI 0110078
2.	USArmy Garrison Hawaii (MS4)	HI S000090
3.	Wailua Wastewater Treatment Plant*	HI 0020257
4.	Ala Wai Harbor, Waianae Harbor, Keehi Harbor/Lagoon, Sand Island Launch Ramp Facility, Heeia Kea Harbor, Haleiwa Harbor (Small MS4)	HI S000009

Second Quarter (January 2013 - March 2013)

5.	Kaunakakai Bulk Terminal	HI 0020966
6.	Kapaa Sanitary Landfill and Transfer Station	HI S000100
7.	Hawaii Army National Guard Maintenance Shops and Small MS4 on Oahu	HI S000052
8.	DAGS Small MS4 and Industrial Facilities	HI S000089
9.	US Air Force 15th Civil Engineering Squadron	HI S000069

Third Quarter (April 2013 - June 2013)

10.	Naval Information Operations CMD Hawaii	HI 1121156
11.	Honolulu International Airport Small MS4	HI S000005

Fourth Quarter (July 2013 - September 2013)

12.	Papaikou-Paukaa WWTP	HI 0021113
13.	Hawaii Institute of Marine Biology	HI 0021644

*MAJOR FACILITIES

PERMIT ISSUANCE SCHEDULE - FY 2014

First Quarter (October 2013 - December 2013)

1.	East Honolulu WWTP*	HI 0020303

Second Quarter (January 2014 - March 2014)

2.	Kahului Generating Station*	HI 0000094
3.	Topa Financial Center	HI 0021768

Third Quarter (April 2014 - June 2014)

4.	Napili Well "A" GAC	HI 0021661
5.	Keahole Point Fish, LLC	HI 0021825

Fourth Quarter (July 2014 - September 2014)

6.	Honolulu Marine LLC	HI 0021835

* MAJOR FACILITIES

PERMIT ISSUANCE SCHEDULE - FY 2015

First Quarter (October 2014 - December 2014)

Second Quarter (January 2015 - March 2015)

1.	Maalaea Generating Station	HI S000004
2.	Kahala Hotel & Resort	HI 0021300

Third Quarter (April 2015 - June 2015)

Fourth Quarter (July 2015 - September 2015)

3.	Department of Agriculture Small MS4	HI S000088

*MAJOR

ATTACHMENT 3 - Watershed Assessments/TMDL Program Plan

1. Program Objectives/Outcomes

In cooperation with other components of the Water Pollution Control Program (CWA Section106) and with the Water Quality Management Planning Program [see the 604(b) workplan for description of activities], the Environmental Planning Office (EPO) Watershed Assessment/TMDL Program for FY-11/12 pursues Federal Objective 2.1: Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters, and Federal Objective 2.2: Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.

TMDLs submitted to EPA by 09/30/2012 will establish load allocations and load reduction requirements that will be used to focus polluted runoff control activities on particular source areas and delivery mechanisms. Watershed inventories, non-point source loading information, and calculations developed during the TMDL process will assist the completion of watershed based plans that meet the nine (9) required elements of EPA guidance for CWA 319 incremental funding and certain elements of the CZARA-required OSDS strategy. The wasteload allocations (WLA) in approved TMDLs will be used to establish NPDES permit conditions, including (i) facility-specific effluent limitations and/or (ii) requirements for watershed-specific and site-specific stormwater management measures that lead to WLA achievement.

Data collected for Watershed Assessment/TMDL development purposes (including fish toxicity screening studies and biological assessments of streams) will be also used to:

- complete public health risk assessments (fish consumption);
- make waterbody attainment decisions for CWA 305(b)/303(d) Integrated Reporting for 2012 reporting cycle and beyond;
- develop recommendations for the Comprehensive Water Quality Monitoring Strategy, especially with regard to detecting changes that indicate the achievement of environmental results. An important part of the Strategy will be describing the rationale and principles used to delineate and sample the assessment decision units within which these changes are detected and to which these indicators are linked.
- support the review and revision of chemical and physical water quality criteria;
- identify the appropriate parameters, measures, and criteria for monitoring stream biological communities; and
- assess relative changes in stream bottom biological communities over time.

TMDL implementation frameworks will be included in TMDL submittals and used to target CWA 319 funding in subsequent fiscal years.

Table 1. summarizes the tasks/outputs and schedules for TMDL development, approval, and implementation. Table 2. provides budget details for TMDL development contracts and other contract work administered by EPO. Watershed Assessment/TMDL Program activities are conducted primarily by federal and state-funded EPO, CWB, and State Laboratories staff. Given the integrative nature of these activities, EPO staff relies upon collaboration, cooperation, and data sharing with nearly all programs, sections, units, and staff in the HIDOH Environmental Health Administration (EHA), as well as with numerous federal, state, and county agencies

(including the University of Hawaii system); NGOs and community groups; and private interests in order to complete program tasks and achieve program objectives.

HIDOH proposes continuing various contract mechanisms to increase EHA water program capacity. A Memorandum of Agreement with the University of Hawaii Water Resources Research Center provides for programmatic water quality laboratory services, including both analytical work and technical documentation ($25,000). A Direct Project Agreement with the Research Corporation of the University of Hawaii provides an RCUH employee trained and experienced in numerous aspects of field and office work that contribute to the achievement of program objectives on a daily basis ($67,914). We propose adding one-half year of funding to continue the programmatic work of another RCUH employee who was previously funded by ARRA through CWA 604(b). This will allow us to edit and maintain the National Hydrography Dataset for Hawaii, which provides a common addressing system for all HIDOH water program decisions, including ADB georeferencing.

Responsible Section, Unit, or Staff:

Program Manager (Vacant) (Planner VI) + EPO staff
- Water Quality Management Planning Specialist, Honda (EHS IV)
- Assessment Coordinator, Koch (EHS IV)
- TMDL Coordinator, Penn
- Public Participation Coordinator (PPC), Sakamoto
- Administrative Support, Matsunaga (Secretary II)

Resources:

Federal FY11:	$
Federal FY12:	$
State:	$0
Contracts FY11:	$121,046 (see Table 2 and last paragraph of previous page.)
Contracts FY12:	$

Table 1. Hawaii TMDL Development for Impaired Waters (Program Activity Measure WQ-8*)

FY11-FY12 timeline for completing TMDLs to provide scientific basis for LA and WLA that must be implemented to achieve WQS

FY11 Target – 8 TMDLs (Hanalei 2, Waikele 1, Kapakahi 1, Kaelepulu 4)

FY12 Target - 5 TMDLs (Five Pearl Harbor streams)

May 17, 2006; updated October 06, 2006; April 01, 2007; April 25, 2007; April 14, 2008; May 23, 2008; December 05, 2008; June 15, 2009; December 15, 2009; March 16, 2010; April 22, 2010; Sept. 30, 2010 ; November 04, 2010 (yellow highlight indicates new material)

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
All Priority Watersheds & TMDLs		**Water Quality Assessment Specialist (WQAS) RCUH contract for overall technical and administrative support, other contracts for specific assessment and TMDL development tasks (See Table 2 for all contract details)**	CWB (Admin)						**RCUH contract ends March 2011, to be extended through Sept. 2011 with new funds from 106 and 604(b). WQAS under recruitment.**
Hilo Bay Watershed, Hawaii		Dismissed from priority watersheds in December 2006. Hilo Bay Watershed Advisory Group still functioning, http://www.hilobaywatershed.org/ University of Hawaii-Hilo (UHH) phytoplankton and water quality monitoring data at http://www.plankton.uhh.hawaii.edu/ USDA-NRCS Rapid Watershed Assessment completed, ftp://ftp-fc.sc.egov.usda.gov/HI/pub/technical/rwa/09_rwa/Hilo_RWA.pdf USACE Hilo Bay water circulation and water quality study completed, http://www.co.hawaii.hi.us/info/Hilo/Hilo%20WCWQ%20Report%20FINAL2%20January2009.pdf University of Hawaii-Hilo Hilo (UHH) report completed - WATER QUALITY IN HILO BAY, HAWAII, U.S.A., UNDER BASEFLOW AND STORM CONDITIONS, http://www.hilobaywatershed.org/research/Hilo Bay Final Report 2009.pdf Hawaii County CZM/UHH water quality sampling completed, http://www.hilobaywatershed.org/research/Final Water Quality Report 2008.pdf DLNR Wailoa sedimentation report completed (2007), Requesting the DLNR to recommend solutions to abate and prevent the accumulation of sediment at Wailoa SBH and along Hilo bayfront. USGS/County drywell assessment completed, Scientific Investigations Report 2009-5249, Reconnaissance Assessment of the Potential for Roadside Dry Wells to Affect Water Quality on the Island of Hawai'i. Wiegner, T.N., Tubal, R.L., and R.A. MacKenzie. 2009. Bioavailability and export of dissolved organic matter from a tropical river during base- and stormflow conditions *Limnol. Oceanogr.* 54: 1233-1242. Lucas H. Mead and Tracy N. Wiegner. 2010. Surface Water Metabolism Potential in a Tropical Estuary, Hilo Bay, Hawai'i, USA, During Storm and Non-storm Conditions. Estuaries and Coasts Volume 33, Number 5, 1099-1112.							No action items re: Watershed Plan completion.

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
Waiakea & Alenaio Streams	nutrients turbidity	TMDLs USGS report published, March 2008, http://pubs.usgs.gov/of/2007/1429/ Preliminary modeling conducted by contractor (ended Sept. 2006).	CWB		6 TMDLs				
		Basic TMDL Implementation Plan - Integrate efforts with CWB-PRC & Watershed Advisory Group (WAG)	CWB						
Wailoa Estuary	enterococci chlorophyll	a. Project Planning/Watershed Inventory, Scoping Report, Field Sampling Plan b. Field Sampling/data packages and database entries c. Load Calcs/TMDLs, LAs, WLAs d. Reporting/Submittal e. Basic Implementation Plan	CWB		5 TMDLs				
		Discussed collaboration with DLNR Aquatic Resources for monitoring suspected nutrient-laden groundwater inputs.							
Hilo Bay Embayment	nutrients turbidity		CWB	Pending final revision of 2008/2010 Water Quality Monitoring and Assessment Report.					
Iao Stream, Maui	nutrients trash	a. Project Planning/Watershed Inventory, Scoping Report, Field Sampling Plan b. Field Sampling/data packages and database entries c. Load Calcs/TMDLs, LAs, WLAs d. Reporting/Submittal e. Basic Implementation Plan	CWB		2 TMDLs				
		In June 2006, the State Commission on Water Resource Management (CWRM) entered into a cooperative agreement with USGS to conduct a multi-phase study to assess hydrological and biological conditions of Waihee River and Waiehu, Iao, and Waikapu Streams. This was undertaken as a cooperative project between the USGS, Maui Department of Water Supply, Maui County Office of Economic Development, Office of Hawaiian Affairs, and the Commission. USGS hosted a cooperator's meeting in August 2009 (DOH was not invited), and recently published Scientific Investigations Report 2010-5011, *Effects of Surface-Water Diversion on Streamflow, Recharge, Physical Habitat, and Temperature, Nā Wai 'Ehā, Maui, Hawai'i.* EPO testified to CWRM's contested case hearing as requested by Earthjustice. CWRM issued its decision in June 2010, see http://hawaii.gov/dlnr/cwrm/currentissues_CCHMA0601.htm. Earthjustice filed a notice of appeal with the Hawaii Supreme Court, case is pending. USACE Flood Control Project in progress, see http://www.poh.usace.army.mil/CW/addInfo/Full%20Report_'Iao%20Stream_FCP_DraftEA_0309.pdf							

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
S. Molokai Open Coastal Waters, Molokai (Revised Coastal ADUs)	nutrients turbidity susp. solids	Consolidate legacy coastal waters listings into revised ADUs Complete Watershed Plan	CWB CWB (PRC)						Pending final revision of 2008/2010 Water Quality Monitoring and Assessment Report
		USGS Coral Reef research, http://coralreefs.wr.usgs.gov/molokai.html The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment-Threatened Fringing Reef, pubs.usgs.gov/sir/2007/5101/ USGS Ridge-to-Reef research, http://biology.usgs.gov/pierc/Pollution_&_Ecological_Restoration/Ridge_to_Reef_Molokai_Investigations.htm Hawaii Institute of Marine Biology, Coral Reef Assessment and Monitoring Program, http://cramp.wcc.hawaii.edu/Watershed_Files/Molokai/WS_Molokai_molokai_SouthMolokai.htm NOAA 2009 Molokai Watershed Recommendations, http://data.nodc.noaa.gov/coris/library/NOAA/CRCP/project/1906/molokai_wshed_recommend.pdf							
S. Molokai Open Coastal Waters, Molokai (Revised Coastal ADUs)		a. Project Planning/Watershed Inventory, Scoping Report, Field Sampling Plan b. Field Sampling/data packages and database entries c. Load Calcs/TMDLs, LAs, WLAs d. Reporting/Submittal e. Comprehensive Implementation Plan	CWB		4 TMDLs				
		USGS contract for basic data collection & and sediment load characterization completed. Draft Watershed Inventory and Scoping Report completed (Sept. 2006).							
Waimanalo Watershed, Oahu	Reconfirmed as one of three priority watersheds in December 2006. Located within Koolaupoko Watershed Planning Area (final plan dated 2007). TMDLs and implementation plan completed for Waimanalo Stream nutrients and sediments, WLA implementation plan and monitoring plans submitted by NPDES permittees. Drainage and flood control concerns exacerbated by 2006 dam breach at Kailua Reservoir. 319 project with Oahu RC&D underway. Other inland and marine waters remain unassessed, thus the potential/need for further TMDL development throughout the watershed is unknown.								
Various marine Stations	enterococci	Consolidate previous marine Station listings for enterococci into revised ADUs	CWB	Pending final revision of 2008/2010 Water Quality Monitoring and Assessment Report					

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
Waimanalo Stream		TMDLs - Do State facilities require Small MS4s? Such as DOA (agricultural/residential lots and irrigation system baseyard); UH (agricultural experiment station); DHHL lots/subdivisions? Reassess stream habitat quality and biological integrity (Hawaii Stream Bioassessment Protocol) Complete water quality monitoring assessment and reporting for other inland waters	EPO CWB CWB		Approved May 2001 3 TMDLs				
Kapaa Stream, Oahu	nutrients turbidity susp. solids metals	TMDLs	EPO		Approved July 2007 3 TMDLS				TMDLs not completed for metals.
		Basic Implementation Plan Koolaupoko Watershed Plan completed WLA Implementation Plans	CWB CWB CWB						Upstream tributary to Kawainui Marsh/Kawainui Stream.
Kaelepulu Inland Waters, Oahu	turbidity nutrients enterococci chlorophyll a	a. Project Planning/Watershed Inventory, Scoping Report, Field Sampling Plan b. Field Sampling/data packages and database entries c. Load Calcs/TMDLs, LAs**,** WLAs d. Reporting/Submittal e. Basic Implementation Plan f. WLA Implementation Plans	CWB CWB	July 2011	**Sept. 2011 4 TMDLs**				

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
Contract with UH-CTAHR for project management, field sampling, lab analysis, extended to FY11. Modify contract before Dec. 2010 to rectify $ (based on actual FY2009-2010 CWA 106 spending) and extend time. Remaining tasks include biological survey, wet weather sampling (design and collection), bacterial source tracking, sanitary survey report, data analysis, load calculations, working group participation, decision document. Project paper accepted for presentation at national meeting (WEF Impaired Waters 2011). Koolaupoko Watershed Plan completed 2007. USGS wastewater and nutrient source tracking completed, http://hi.water.usgs.gov/studies/kaelepulu/ EPO Volunteer Monitoring Project completed (bacterial indicator baseline). Draft Sampling and Analysis Plan received Sept. 2006 Enchanted Lake Residents Association, http://kaelepulupond.org/ Kaelepulu Wetland, http://enchantedmarsh.com/, http://www.kaelepuluwetland.com/. Note that wetland owners are pursuing solutions, possibly including legal action, to "Drainage problems at 1469 Kiukee Place, Kailua, Hawaii 96734." See Document: 018966, Document Date: 7/19/2008, and CONFIDENTIAL DOH-EHA ATTORNEY-CLIENT MEMO, August 21, 2008. USEPA Watershed Priorities, http://www.epa.gov/region09/water/watershed/kaelepulu.html EPO Leg. Report http://gen.doh.hawaii.gov/sites/LegRpt/20081/Report to the Twenty-Fourth Legislature_Kailua Waterways Final.pdf Legislation tracked 2008, funds for investigating the feasibility of transferring water from Kawainui Marsh to Kaelepulu were awarded to Oceanit by DLNR (in progress). USACE Southeast Oahu Regional Sediment Management Project at http://chl.erdc.usace.army.mil/chl.aspx?p=s&a=Projects;191 City & County of Honolulu, Storm Water Best Management Practices (BMP) Plan for Four Major Outlets at Ka‘elepulu Pond, available at http://kaelepulupond.org/bmp/default.htm									
Kawa Watershed, Oahu	*Dismissed from priority watersheds in December 2006.* Located within Koolaupoko Watershed Planning Area (final plan completed 2007). TMDLs and implementation plan completed for Kawa Stream nutrients and sediments, WLA implementation plan and monitoring plans submitted NPDES permittees. In-channel erosion and habitat/aquatic life heavily influenced by City "channel improvements."				Approved May 2002 Revised Sept. 2005 State Veterans Cemetery needs Small MS4 permit.				
Kaneohe Bay Embayment, Oahu	nutrients turbidity susp. solids	Consolidate legacy listings for nearshore waters at mouths of Kaneohe and Kawa streams with previous Station listings for Total N, nitrate-nitrite, ammonium, turbidity, enterococci, and total P into revised ADUs.	CWB						Pending final revision of 2008/2010 Water Quality Monitoring and Assessment Report
Kaneohe Stream, Oahu (Includes Kamooalii Stream tributary)	nutrients turbidity susp. solids	TMDLs	EPO		Approved Feb. 2010 3 TMDLs				
		Basic Implementation Plan WLA Implementation Plans	CWB CWB	Koolaupoko Watershed Plan completed. DOH State Hospital and DOD State Veterans Cemetery need Small MS4 permits.					

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
Kaukonahua Stream (N. and S. Fork)/Wahiawa Reservoir (Lake Wilson)	nutrients turbidity	TMDLs Used load duration curve approach for stream TMDLs. Outreach through UH-CTAHR Watershed Participatory Assessment and Action Project and North Shore Neighborhood Board. WLA Implementation Plans	EPO CWB CWB		Approved Jan. 2010 4 TMDLs	Phased TMDL. Next phase will focus on lower stream reaches, Army may collaborate to establish and operate monitoring stations. Reservoir operations and impacts will change after dam system modifications are completed.			
Pearl Harbor Watershed, Oahu									
Waikele and Kapakahi streams **Waiawa, Waimano, Kalauao, Aiea, and Halawa streams**	TSS (nutrients postponed, do sediment TMDLs first)	TMDLs Waikele TMDLs will be submitted as phased TMDL and developed in conjunction with U.S. Army/City Central Oahu Watershed Study (COWS Phase II completed using WARMF model). U.S. Army data and GSSHA modelling report is forthcoming, USGS data collection for City runs through 2012. **Explore use of CWA 319 funds to assist with water quality modelling efforts supporting TMDL implementation.**	CWB	April 2011 FY12	**FY11 2 TMDLs** **FY12 5 TMDLs**				Contract for tech support; set up, run, and document water quality models for TMDL development and implementation. Modify contract by March 31, 2011 to extend the contract end date to Sept 30, 2011.
		Basic Implementation Plan WLA Implementation Plans DOH Waimano Ridge facility needs Small MS4 permit. Navy MS4 permit conditions are insufficient for serving TMDL information needs.	CWB CWB						Kapakahi Watershed Plan completed.
Pearl Harbor Estuary & Open Coastal Waters	nutrients turbidity susp. solids PCBs	Consolidate legacy estuary & open coastal listings with previous Station listings for Total N, chlorophyll a, turbidity, and Total P into revised ADUs	CWB		12 TMDLs				Pending final revision of 2008/2010 Water Quality Monitoring and Assessment Report
(Revised Estuary & Open Coastal Water ADUs)	various	a. Project Planning/Watershed Inventory, Scoping Report, Field Sampling Plan b. Field Sampling/data packages and database entries	CWB HEER						Estuary proposal received from U.S. Navy. The sediment study is

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
		c. Load Calcs/TMDLs, LAs, WLAs d. Reporting/Submittal e. Comprehensive Implementation Plan Request EPA assistance. Collaborate with U.S. Navy to plan & complete estuary/coastal TMDLs.							currently in the RI/FS phase, with an RI Addendum Report expected to be completed in early 2011.
Nuuanu Stream, Oahu	nutrients turbidity TSS trash chlordane dieldrin	a. Project Planning/Watershed Inventory, Scoping Report, Field Sampling Plan (FY08-FY11) b. Field Sampling/data packages and database entries c. Load Calcs/TMDLs, LAs, WLAs d. Reporting/Submittal e. Comprehensive Implementation Plan	CWB	FY12	FY13 8 TMDLs				New trash TMDLs in California may provide a useful model for TMDL development.
Kalihi Stream, Oahu	nutrients turbidity trash		CWB	FY12	FY13 4 TMDLs				
		Scoping process to be completed in FY11. Community-based Kalihi watershed planning efforts, availability of long-term USGS streamflow data, and synchronicity with City sewer collection system reconstruction projects. Sampling conducted by EPO in 2010 indicates elevational gradients of nutrient concentrations, with highest nutrient levels in the Kamanaiki tributary (Kalihi) and Waolani tributary (Nuuanu).							
Kewalo Basin Embayment, Oahu	nutrients susp. solids turbidity trash	Consolidate legacy embayment listings with previous Station listings for Total N, Total P, turbidity and chlorophyll a into revised ADUs, pending final 2008/2010 Water Quality Monitoring and Assessment Report. Possible pilot for Oahu-wide trash TMDL. DOT Harbor SWMP in place (Phase II NPDES).							
(Revised Embayment ADUs)	various	a. Project Planning/Watershed Inventory, Scoping Report, Field Sampling Plan b. Field Sampling/data packages and database entries c. Load Calcs/TMDLs, LAs, WLAs d. Reporting/Submittal e. Comprehensive Implementation Plan	CWB		4 TMDLs				
Ala Wai Watershed, Oahu	Dismissed from priority watersheds in December 2006. TMDLs completed for Ala Wai Canal nutrients, WLA implementation plan and monitoring plan submitted by NPDES permittees. Ongoing U.S. Army and City restoration planning, flood management, and ecosystem repair projects (planning and CIP), including chlordane and dieldrin source and loading analysis, see http://www.alawaiwatershed.com/, http://www.alawaicanalproject.net/, and USACE Peer Review Plan at http://www.poh.usace.army.mil/CW/addInfo/AlaWai18MarRPApproved.pdf Recent sewage spill. Previous watershed management plan by City & DOH.							

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
Ala Wai Canal (Estuary) & Harbor (Embayment)	nutrients pathogens metals turb/TSS Organochlo -rine pesticides Lead	Consolidate legacy estuary & embayment listings with previous Station listings for enterococci, Total N, Total P, chlorophyll a, and nitrogen into revised ADUs	CWB						Pending final revision of 2008/2010 Water Quality Monitoring and Assessment Report
Hanalei Bay Watershed, Kauai	Reconfirmed as one of three priority watersheds in December 2006. EPA Watershed initiative completed. USGS/USDA characterization/modelling of upper watershed completed. USWFS Refuge Management Plan is a key implementation element, Refuge Conservation Planning is in progress. Contract with Hanalei Watershed Hui for Watershed Based Plan is pending. Ongoing implementation activities at Waipa and Waikoko. Coral Reef LAS monitoring funds recently awarded to Hanalei Watershed Hui, but status of future beach monitoring and stream monitoring for CWB is uncertain. Impairment status of Hanalei, Waioli, Waipa, and Waikoko streams will be reevaluated for 2008/2010 Integrated Report. Depending upon the outcome, additional TMDLs could be developed for these streams, particularly for nutrients.								
Hanalei River (Stream & Estuary)	Turbidity enterococci	Final Watershed Initiative Report and Draft TMDL report received Sept. 2006. Stream Bioassessment fieldwork completed Sept. 2006. TMDL count revised to conform with 2006 303(d) list.	EPO		Approved Sept. 2008 6 TMDLs				Phased TMDL
		Basic Implementation Plan for nutrient, sediment , and bacterial TMDLs	EPO CWB						
Waioli, Waipa, & Waikoko Estuaries	turbidity	a. Project Planning/Watershed Inventory, Scoping Report, Field Sampling Plan b. Field Sampling/data packages and database entries **c**. Load Calcs/TMDLs, LAs, WLAs d. Reporting/Submittal e. Comprehensive Implementation Plan	EPO		Approved Sept. 2008 3 TMDLs				Phased TMDL
Hanalei Bay Embayment (Kauai)	turbidity enterococci	Consolidate legacy embayment listings with previous Station listings into revised 2006 ADUs	CWB						
	turbidity enterococci	Load Calcs/TMDLs, LAs, WLAs Reporting/Submittal Comprehensive Implementation Plan	CWB CWB	**Oct. 2010**	**Dec. 2010 2 TMDLs**				Region 9 contract with Tetra Tech ended August 2010.
Nawiliwili Bay Watershed, Kauai	Dismissed from priority watersheds in December 2006. Nawiliwili Bay Watershed Plan completed.								
Huleia, Papakolea, Puali, and Nawiliwili	Total N Total P	TMDLs	EPO	July 2008	Approved Sept.				

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
Streams	TSS enterococci				2008 20 TMDLs				
		Basic Implementation Plan WLA Implementation Plans	CWB CWB						
Nawiliwili Bay Embayment	turbidity nutrients	Consolidate legacy embayment listings with previous Station listings for enterococci, nitrate/nitrite, ammonium, turbidity and chlorophyll a into revised ADUs; Pending final revision of 2008/2010 Water Quality Monitoring and Assessment Report CWB							
West Maui Watershed	various	Consolidate listings into revised ADUs Baseline monitoring to evaluate impairment status	CWB CWB (WO) DLNR						CWB sampling completed September 2010.
Added to priority watersheds in December 2006. ADU and monitoring strategy for Kahana open coastal waters prepared by CWB-PRC. Monitoring Design Workshop completed December 2008, developed sampling plan for assessment of water quality status. The Hawaii Coral Reef Working Group recently decided to prioritize areas north and south of Kahana (Honokowai and Wahikuli) for program funding. EPA and DOH revised the probabilistic monitoring decision unit boundary and changed the sampling plan to align with these new priorities. However, the Corps of Engineers planning process will look at an even larger area, from Lahaina to Honolua. USACE planning in progress, see West Maui Watershed Reconnaissance Study, Final Stakeholder Coordination Report, available at http://www.poh.usace.army.mil/CW/addInfo/WestMauiStakeholderReportAugust2009.pdf. See also http://www.poh.usace.army.mil/CW/CWProjects.htm#HIMa.									
Honolua Stream	Not assessed	The State of Hawaii Commission on Water Resource Management (CWRM) is developing Instream Flow Standards (IFS) for these streams. CWRM staff and CWB staff concur that it would be useful for IFS development to include collaboration with CWB for waterbody assessment, and, if necessary, TMDL development.							
Honokohau Stream	Entero not assessed, attains other criteria (based largely on combined season data)								

Impaired Water Bodies (EHA Watershed priorities in bold type)	Pollutants[1]	Schedule (Development Steps/Deliverables) Activities to be completed by the end of FY10 are in bold type	Responsible Section, Unit, or Staff	TMDL Public Notice (Date)	TMDL Submit to EPA (Date)	FY11 Funding Amount/Person Months			Comments
						106	604 (b)	Other	
Maunalua Bay, Oahu	nitrogen chl a (single station)	NOAA awarded ARRA funding to The Nature Conservancy and Mālama Maunalua to implement a large-scale invasive alien algae removal program as the necessary first step to restore habitat in the Kuli‘ou‘ou reef flats of Maunalua Bay. See http://www.nature.org/wherewework/northamerica/states/hawaii/marine/art21062.html. Malama Maunalua monitors water quality, see http://malamamaunalua.org/watershed-studies.asp, and recently published 2009 MAUNALUA BAY REGIONAL WATERSHED STRATEGY--A COMMUNITY APPROACH The Hawaii Coral Reef Working Group recently decided to prioritize this area for program funding, and CWB recently awarded a 319 grant to Malama Maunalua. USACE Flood Damage Reduction project in progress for Wailupe Stream, see http://www.poh.usace.army.mil/CW/reports/R-HIOa-20071017FRO-Wail.PDF and http://www.poh.usace.army.mil/CW/CWProjects.htm#HIMa							
Pelekane Bay, Hawaii	various	NOAA's Restoration Center awarded ARRA funding to the Kohala Center and the Kohala Watershed Partnership to reduce land based sources of pollution in the watershed. See http://www.kohalacenter.org/kwppelekane/about.html, http://hawp.org/kohala.asp The Hawaii Coral Reef Working Group recently decided to prioritize this area for program funding, and CWB previously awarded 319 funds to the Mauna Kea Soil & Water Conservation District for watershed management planning. See http://hawaii.gov/health/environmental/water/cleanwater/prc/pdf/PelekaneBayMgtPlanOptimized.pdf Tissot, B.N. 1999. Changes in the marine habitat and biota of Pelekane Bay, Hawaii over a twenty year period, http://www.coralreefnetwork.com/research/pelekane/Tissot_Pelekane_Bay_1999.pdf							

[1]Pollutants are based on Hawaii’s 2006 303(d) list.

Table 2. Budget Details for EPO Contracts

Contractor	Project	Amount		
		106 FY11	106 FY12	604(b) FY**
USGS	Maui Bioassessment (Benthic Invertebrates) (See Attachment 4)	19,000 (MI)		
UH-WRRC	Water Quality Laboratory Services	2,500		22,500
RCUH	Water Quality Assessment Project			
	Water Quality Assessment Specialist – technical support for TMDL development, watershed assessment, and stream bioassessment	67,914		
	Geospatial Information Specialist (0.5 FTE) - Develop and implement a Data Management and Analysis System to support Integrated Report production, using NHD and ADB components, and including lead technical support for Hawaii NHD Stewardship	31,632		31,632 FY09 (ARRA) to March 2011
TBD	Contractor support for watershed assessment and TMDL development (Kaelepulu, Pearl Harbor, Kalihi, Nuuanu, Kaukonahua/Wahiawa).			89,719 FY09
				98,289 FY10
Counties	Water Quality Management Planning Pass-Through			15,900 FY10
TOTAL	**All State contracts** (except for Monitoring Initiative)	**102,046**		
TOTAL	All State contracts	121,046		

ATTACHMENT 4 - Monitoring Initiative Funds

USGS Bioassessment in Maui

The overall objective of this two-year study is to provide the HIDOH with new tools needed to assess the biological condition of streams in Hawaii. The new assessment tools will be based on benthic invertebrates and will be applicable to both targeted and probabilistic monitoring designs employed by the HIDOH Environmental Planning Office and the Clean Water Branch.

Budget

FY11	**$19,000**

ATTACHMENT 5 – Supplemental Grants Workplan

Clean Water Act (CWA) Section 106 FY 2011 Supplemental Grants Workplan
Department of Health, Clean Water Branch

Work Plan Component/Program:	**EPA Contact:**	**State Contact:**
NPDES	Sara Roser	**Alec Wong**

Description: The Integrated Compliance and Information System-NPDES (ICIS-NPDES) is the database of record supporting the NPDES program. In addition to ICIS-NPDES, the Hawaii Department of Health (HIDOH) has been working with a contractor to develop HIDOH's Water Pollution Control (WPC) system. WPC will help HIDOH track NPDES permits, compliance, and enforcement processes. This workplan supports HIDOH's compliance and enforcement process, and it will provide a system to track results of an inspection for both permitted and non-permitted facilities. In particular, HIDOH will have the capability to track single event violations (e.g., failure of Best Management Practices, etc.) within HIDOH's Water Pollution Control (WPC) data system.

Outcome: WPC will allow HIDOH to manage inspection and enforcement actions as well as allow HIDOH to generate both inspection and enforcement documents, which ICIS-NDPES currently does not provide. The WPC system will allow HIDOH to manage resources for timely NPDES inspection reporting and enforcement actions.

Measure: Inspection and enforcement document generation will be much more streamlined and standardized within WPC.

Deliverables	**Activities**	**Federal**	**State**	**Actual**
1. Permit and non-permitted facility inspection data management	1. Contractor works with HIDOH to define business needs and uses defined requirements in ICIS-NPDES.	**$23,000**		
2. Tracking inspection results, single-event violations, and uploaded documentation	2. Contractor works with HIDOH to define specific data fields that need to be tracked and map single event violation codes between WPC and ICIS-NDPES.	**$13,000**		
3. Inspection report documentation generation capabilities	3. Contractor works with HIDOH to develop the logic for managing inspections and enforcement actions.	**$40,600**		
4. Enforcement action data management	4. Contractor works with HIDOH to develop inspection reports based on compliance data collected from the field.	**$15,000**		
5. Enforcement action document generation capabilities, using different templates	5. Contractor works with HIDOH to define enforcement action document templates to ensure that they conform to HIDOH and EPA standards.	**$15,000**		
Federal Share **State Match** **Task Total**		**$106,600** **$0** **$106,600**	**$0** **$0**	